



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

SUBJECT: NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT

PROJECT TITLE: PROPOSED AMENDED RULE 1158 - STORAGE, HANDLING, AND TRANSPORT OF COKE, COAL AND SULFUR

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD), as the Lead Agency, prepared this Draft Environmental Assessment (EA) pursuant to its certified regulatory program (SCAQMD Rule 110), which assesses potential environmental impacts that may result from implementing the proposed project identified above. The Draft EA concludes that there will be no significant adverse environmental impacts from implementing the proposed project.

This letter, the Notice of Completion (NOC) and the attached Draft EA are not SCAQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary. The proposed project's description, location, and potential adverse environmental impacts are described in the NOC and in the Draft EA.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. Michael Krause (c/o CEQA Section, Planning, Rule Development and Area Sources) at the address shown above, or sent by FAX to (909) 396-3324 or by e-mail to mkrause@aqmd.gov. Comments must be received no later than 5:00 PM on June 12, 2008. Please include the name and phone number of the contact person for your agency. Questions relative to proposed amended Rule 1158 should be directed to Ms. Pamela Perryman at (909) 396-3103.

The Public Hearing for the proposed amended rule is currently scheduled for July 11, 2008. Note: the Public Hearing date is subject to change.

Date: May 14, 2008

Signature: _____

Steve Smith

Steve Smith, Ph.D.
Program Supervisor
Planning, Rules, and Area Sources

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765-4182

NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT

Project Title:

Draft Environmental Assessment (EA) for Proposed Amended Rule 1158 - Storage, Handling, and Transport of Coke, Coal, and Sulfur

Project Location:

South Coast Air Quality Management District (SCAQMD) area of jurisdiction consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin and the Mojave Desert Air Basin.

Description of Nature, Purpose, and Beneficiaries of Project:

The purpose of the currently proposed amendments to Rule 1158 is to clarify rule definitions, add compliance flexibility and clarify rule applicability. To accomplish these objectives, definitions of terms used in the exemption section have been added; definitions have been modified to clarify rule intent; railcar operations not explicitly listed, but currently subject to the rule, have been added; additional exemptions are provided; and obsolete language has been deleted. The Draft EA concluded that the proposed project could potentially generate adverse air quality impacts during construction and water demand impacts during operation, but the impacts would not be significant. The Draft EA also concluded that no other environmental topic areas would be significantly adversely affected by the proposed project.

Lead Agency:

South Coast Air Quality Management District

Division:

Planning, Rule Development and Area Sources

Draft EA and all supporting documentation are available at:

SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

or by calling:

(909) 396-2039

The Draft EA can be accessed on the SCAQMD's website at:

<http://www.aqmd.gov/ceqa/aqmd.html>

The Public Notice of Completion is provided through the following:

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Los Angeles Times (May 14, 2008) | <input checked="" type="checkbox"/> AQMD Website | <input checked="" type="checkbox"/> AQMD Permit Holders & Interested Parties (e.g., public workshop attendees) Mailing List |
|--|--|---|

Draft EA Review Period:

May 14, 2008 – June 12, 2008

Scheduled Public Meeting Dates:

SCAQMD Governing Board Hearing: July 11, 2008, 9:00 a.m.; SCAQMD Headquarters

The proposed project will not have regional and areawide significant impacts, therefore, a CEQA scoping meeting is not required (pursuant to Public Resources Code §21083.9(a)(2)).

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Draft Environmental Assessment for:

Proposed Amended Rule 1158 – Storage, Handling, and Transport of Coke, Coal and Sulfur

May 14, 2008

SCAQMD No. 080514MK

State Clearinghouse No. TBD

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CHAPTER 1 - PROJECT DESCRIPTION

Introduction

California Environmental Quality Act

Project Location

Project Background

Project Objectives

Project Description

Affected Facilities and Engines

INTRODUCTION

The storage, handling, and transport of coke, coal, and sulfur generate fine particulate matter (PM) emissions. PM₁₀ is particulate matter less than 10 microns in diameter and PM_{2.5} is particulate matter less than 2.5 microns in diameter. PM emissions are generated directly from open piles, conveyors, and transfer points, as well as from any activity that disturbs the material, such as moving the pile with a front end loader. Emissions are also generated when material from these sources (e.g., from open piles or uncovered trucks) are deposited on the roadway where the material is then ground up by other vehicles and resuspended into the air. These emission sources contribute to the region's overall air quality, which is not in attainment of the state 24-hour PM₁₀ or federal 24-hour PM_{2.5} standards.

The purpose of Rule 1158 – Storage, Handling, and Transport of Coke, Coal and Sulfur, originally adopted by the South Coast Air Quality Management District (SCAQMD) in 1983 and subsequently amended in 1999, is to control fugitive PM dust emissions from facilities that store, handle and transport coke, coal and sulfur between and including the points of origin and final transport. PAR 1158 is also expected to reduce the potential for the storage, handling and transport of coke, coal and sulfur to violate SCAQMD Rule 402 – Public Nuisance and Rule 403 – Fugitive Dust. Currently, there are approximately 32 facilities that have been identified in the SCAQMD's jurisdiction as subject to Rule 1158.

Of great concern to public health are the particles small enough to be inhaled into the deepest parts of the lung. PM can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM.

The purpose of the proposed amendments to Rule (PAR) 1158 is to clarify rule definitions, add compliance flexibility and clarify rule applicability. To accomplish these objectives, definitions of terms used in the exemption section have been added; definitions have been modified to clarify rule intent; railcar operations not explicitly listed but currently subject to the rule have been added; additional exemptions are provided; and obsolete language has been deleted. No PM emission reductions are anticipated. The Draft EA concluded that the proposed project could potentially generate adverse air quality impacts during construction and water demand impacts during operation, but the impacts would not be significant. The Draft EA also concluded that no other environmental topic areas would be significantly adversely affected by the proposed project.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

PAR 1158 is a “project” as defined by CEQA Guidelines §15378. California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110.

This CEQA document has been prepared pursuant to CEQA Guidelines §15252 and is a substitute document for a Negative Declaration. Therefore, pursuant to CEQA Guidelines §15252(a)(2)(B), alternatives to the proposed project are not required because review of the proposed project showed that the proposed project would not have any significant effects on the environment. As a result, alternatives are not required or proposed to avoid or reduce any effects on the environment that are already demonstrated to be less than significant. This conclusion is supported by the environmental checklist in Chapter 2 showing the possible effects examined in reaching this conclusion.

CEQA requires that the potential environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid significant adverse environmental impacts of these projects be identified. To fulfill the purpose and intent of CEQA, the SCAQMD has prepared this EA to address the potential environmental impacts associated a broad policy program that includes PAR 1158. This Draft EA is intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with detailed information on the environmental effects of the proposed project; and, (b) to be used as a tool by decision makers to facilitate decision making on the proposed project.

All comments received during the public comment period on the analysis presented in the Draft EA will be responded to and included in the Final EA. Prior to making a decision on the proposed amendments, the SCAQMD Governing Board must review and certify the EA as providing adequate information on the potential adverse environmental impacts of the amended rule.

PROJECT LOCATION

PAR 1158 will apply to the SCAQMD's entire jurisdiction. The SCAQMD has jurisdiction over an area of 10,473 square miles (referred to hereafter as the district), consisting of the four-county Basin and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north

and east. The 6,745 square-mile Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1-1).

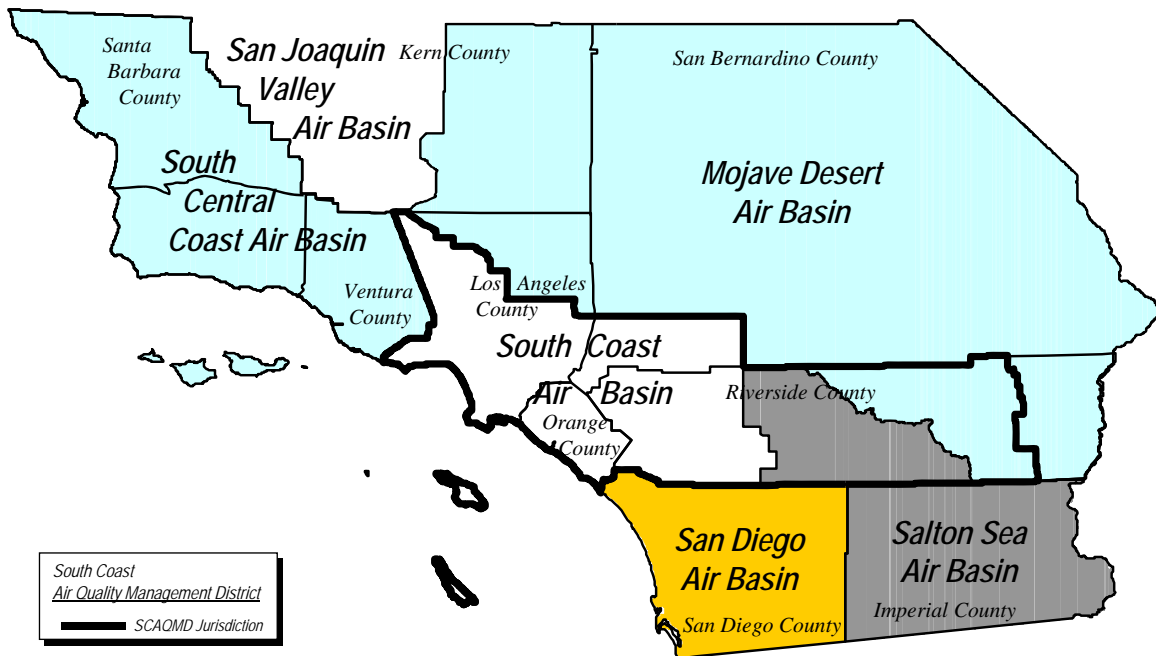


FIGURE 1-1

South Coast Air Quality Management District

PROJECT BACKGROUND

Rule 1158, adopted in 1983, originally regulated PM emissions only from petroleum coke operations. During the 1990's coal, coke and sulfur handling facilities were the source of many community complaints and were issued numerous Notices of Violation (NOV) and Notices to Comply (NC) for Rules 402 – Nuisance, and 403 –

Fugitive Dust, violations. Monitoring data collected in the 1990's confirmed that many facilities subject to Rule 1158, as well as facilities not subject to Rule 1158, were responsible for public nuisances (Rule 402) and for violating fugitive dust-control requirements of Rule 403- Fugitive Dust. Site visits found poor housekeeping and general malfunction of equipment in many cases. Investigation of available control technologies also revealed that some sources were operating with compliant enclosures and good housekeeping practices. The 1999 rule amendment added coal and sulfur to the rule's dust control provisions and tightened requirements to further reduce PM emissions. The 1999 amendments mandated all coke piles and new coal and sulfur piles be enclosed (storage, unloading and transfer operations). Furthermore, the rule set a visible dust standard. The road surfaces and vehicle movement areas where material accumulated had to be paved to allow cleaning. Trucks and trailers transporting materials had to be covered, be leak resistant, and cleaned before leaving the facility. As such, the rule applies to all facilities that store, handle or transport coke, coal or sulfur. Currently there are approximately 32 facilities that have been identified in the SCAQMD's jurisdiction as subject to Rule 1158. There are nine refineries, four sulfur handlers, two foundries, two cement companies, two secondary lead smelting operations, and 13 facilities which handle petroleum coke. Affected facilities are primarily in the area in or adjacent to the ports.

The current rule amendments are proposed to further improve the clarity of the rule and make more explicit the operations intended to be covered by the rule, add flexibility through additional exemptions, and remove obsolete language used during the 1999-2004 phase-in implementation period.

HEALTH EFFECTS FROM PARTICULATE EMISSIONS

Of great concern to public health are the particles small enough to be inhaled into the deepest parts of the lung. Respirable particles (particulate matter less than about 10 micrometers in diameter) can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM₁₀ and PM_{2.5}.

A consistent correlation between elevated ambient fine particulate matter (PM₁₀ and PM_{2.5}) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. Studies have reported an association between long-term exposure to air pollution dominated by fine particles (PM_{2.5}) and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in fine particulate matter concentration levels have also been related to hospital admissions for acute respiratory conditions, to school and kindergarten absences, to a decrease in respiratory function in normal children and to increased medication use in children and adults with asthma. Studies have also shown lung function growth in children is reduced with long-term exposure to particulate matter.

The elderly, people with pre-existing respiratory and/or cardiovascular disease and children appear to be more susceptible to the effects of PM₁₀ and PM_{2.5}.

For more detailed health information from PM emissions, please refer to Chapter 2 – Air Quality and Health Effects, and Appendix I – Health Effects, of the 2007 Air Quality Management Plan, which can be accessed on the SCAQMD website at: <http://www.aqmd.gov/aqmp/07aqmp/index.html>

CURRENT PM AIR QUALITY

The SCAQMD monitored PM₁₀ concentrations at 21 locations in 2007. Highest PM₁₀ concentrations were recorded in Central San Bernardino Valley area and in Perris Valley and Mira Loma in Riverside County. The state 24-hour standard was exceeded at 20 of the 21 monitoring locations in 2007 and the maximum number of exceedances of 71 days was in the Metropolitan Riverside County area. The federal 24-hour standard was not exceeded at any of the locations monitored in 2007. The much more stringent state standards were exceeded in most areas.

The SCAQMD began regular monitoring of PM_{2.5} in 1999 following the U.S. EPA's adoption of the national PM_{2.5} standards in 1997. In 2007, PM_{2.5} concentrations were monitored at 20 locations throughout the district. High PM_{2.5} concentration and the highest number of PM_{2.5} concentration exceedances, at 32 days, were from the inland valley areas of Metropolitan Riverside County. However, PM_{2.5} concentrations were also high in the metropolitan area of Los Angeles County with the highest PM_{2.5} concentration in 2007 located in South San Gabriel Valley. The high PM_{2.5} concentrations in Los Angeles County are mainly due to the secondary formation of smaller particulates resulting from mobile and stationary source activities. In contrast to PM₁₀, PM_{2.5} concentrations were low in the Coachella Valley area of SSAB. PM₁₀ concentrations are normally higher in the desert areas due to windblown and fugitive dust emissions.

PROJECT OBJECTIVES

The objectives of PAR 1158 are to:

1. Clarify the intent of the rule by adding and modifying definitions of terms;

2. Add compliance flexibility through new exemptions;
3. Clarify rule applicability by making more explicit the operations currently subject to the rule; and
4. Delete obsolete language.

PROJECT DESCRIPTION

Proposed Amended Rule 1158

The modifications proposed for Rule 1158 are explained below.

Purpose (subdivision a)

No modifications proposed.

Applicability (subdivision b)

No modifications proposed.

Definitions (subdivision c)

- Definition for “Chemical Stabilizer” [paragraph (c)(5)] has been modified to clarify intent of the definition;
- New proposed definition for “Coker Pit” [paragraph (c)(8)] added;
- New proposed definition for “Dewatering Truck-Loading Bin” [paragraph (c)(11)] added;
- Definition for “Enclosed Storage” [paragraph (c)(14)] has been modified to clarify intent of the definition;
- Outdated definition of “Existing Open Storage” [paragraph (c)(13)] deleted;
- New proposed definition for “Separation Pond” [paragraph (c)(28)] added;
- New proposed definition for “Slurry Bin” [paragraph (c)(28)] added; and
- Definition for “Transfer Point” [paragraph (c)(36)] has been modified to clarify intent of the definition.

Requirements (subdivisions d and e)

- Clarify that the location, such as structures or buildings, used for enclosed storage is subject to the requirements [subparagraph (d)(2)(A)].

- Clarify that compliance with requirements is required except when material or vehicles are entering or leaving [subparagraph (d)(2)(B)].
- Clarify the intent of the rule by adding “railcar” to the following sections in the rule: subparagraph (d)(10)(D), paragraph (d)(12), subparagraph (d)(12)(A), subparagraph (d)(12)(C), paragraph (d)(13), paragraph (d)(14), paragraph (d)(16), paragraph (e)(10), subparagraph (e)(10)(A), and subparagraph (e)(10)(C).
- Clarify the existing allowance under (d)(2)(B) for railcar operators to use other control devices approved by the Executive Officer equivalent to the existing requirements under subparagraphs (d)(12)(A) and (d)(12)(C) [subparagraph (d)(12)(D)].

Open Storage Pile Control Plan (subdivision f)

No modifications proposed.

Compliance Schedule (subdivision g)

- The whole outdated subdivision will be deleted except to void all existing Rule 1158 Interim or Permanent Compliance Plans.

Test Methods (subdivision h)

No modifications proposed.

Compliance Determination and Performance Information (subdivision i)

No modifications proposed.

Recordkeeping Requirements (subdivision j)

No modifications proposed.

Exemptions (subdivision k)

- Outdated compliance requirements will be deleted [subparagraph (k)(1)(A), subparagraph (k)(1)(D), paragraph (k)(6), paragraph (k)(8), paragraph (k)(10), and paragraph (k)(11)].

- Reword the exemption regarding coke in separation ponds to clarify intent of the rule [paragraph (k)(4)].
- Add the size of the beam length for the exempt ships to reflect the width of the Panama canal [subparagraph (k)(6)(B)].
- Add an exemption from requirements for material being actively transported in a front-end loader to clarify intent of the rule [paragraph (k)(8)].
- Add an exemption from requirements for coal inside railcars that originated outside California provided the coal is moistened at the point of entry to a permitted facility [paragraph (k)(9)].

Please refer to Appendix A for the text of PAR 1158.

AFFECTED FACILITIES AND CONTROL METHODS

Facilities subject to Rule 1158 include the following: all oil refineries where petroleum coke is produced, handled, stored, or transported; all facilities involved in the transporting, handling, storing, or ship loading of coke, coal or sulfur; all facilities which handle, transport, or store petroleum coke in piles for use as a fuel source; any facility which handles, transports, or stores petroleum coke in the production of calcined cokes; and all facilities which handle, transport, or store sulfur for the production of prilled sulfur or pelleted sulfur. Approximately 32 existing industrial facilities are subject to Rule 1158. The rule amendments would not increase the number of affected facilities as the modifications do not expand the applicability of the rule requirements, but rather clarify the intent of the rule. There are nine refineries, four sulfur handlers, two foundries, two cement companies, two secondary lead smelting operations, and 13 facilities which handle coke (as opposed to being end-users).

Coal is mined in the eastern and western United States. The coal is sent by railcar to several coke bulk handling facilities at the Ports of Long Beach and Los Angeles, where it is exported as a high BTU (British thermal unit) fuel that competes with oil in domestic and world markets. At the ports, the coke bulk loading facilities tip each railcar (a single train may pull 100 cars) to unload it and then the coal is conveyed to large open piles or a storage barn where it remains until loaded into the holds of ocean-going vessels.

Control technology presently exists to significantly reduce PM emissions from the storage, handling, and transport of coke, coal, and sulfur. Control technologies include enclosures (to serve as a windbreak), enclosed conveyors, baghouses, mist sprays, chemical stabilizers, telescoping loaders, truck trailer covers or slot-tops, tarps, and truck washes.

One proposed amendment to Rule 1158 will allow compliance flexibility for those coal railcars originating outside California provided the coal is moistened to knock down potential airborne PM. Currently, railcars originating from outside California have open beds, which disperse the fine PM emissions from the coal into the atmosphere early in the journey before entering the state of California. Upon entering the permitted facility in the Basin, the coal railcar is required to be covered with a tarp or solid sliding cover. The process of covering the railcar once onsite is costly, labor intensive, and, because the railcar is not stationary for a long time (one hour to one day) before moving on, not economically efficient. Allowing coal to be moistened as substitute compliance instead of covering the railcar would provide flexibility in complying with the existing fugitive dust and opacity requirements in Rule 1158. The watering method is expected to provide equivalent emission reductions as tarping or covering with a solid top. Thus, the exemption would not result in a relaxation of the current requirements but would provide an alternative method of compliance.

In order to comply with the compliance flexibility option in PAR 1158 and ensure the coal is moistened, the affected facility operators would need to install a water spray system (see Figure 1-2) at the entrance of the facility site. Only four known facilities in the SCAQMD's jurisdiction currently import coal by railcar which originated outside California and, thus, would be eligible for the compliance flexibility option. One of the four facilities, Metropolitan Stevedore at the Port of Long Beach, California, has already constructed a water spray system, which is currently operating. Figure 1-2 depicts the railcar entering their property (beginning of chain link fence) on existing rail tracks passing under the water spray bar to moisten the coal. The water spray system can be assembled onsite with minimal equipment, but the system pictured in Figure 1-2 requires an employee to manually activate the water operation. The activation of the water operation is not expected to require an additional full-time employee to conduct such a task. Except for the water spray system shown in Figure 1-2, no new control technology options, beyond those already required, are expected to be needed to comply with PAR 1158.



FIGURE 1-2

Coal Railcar Entering the Affected Facility Passing Under Water Spray System

Other Rule 1158 proposed amendments include adding railcar to various sections of the rule and allowing the use of alternative control devices with control efficiencies equivalent to current control efficiencies. Railcar operations are currently subject to requirements of Rule 1158, but a number of sections of the rule do not explicitly use the term “railcar” operation, which was always intended to be regulated by the rule. In order to provide clarification as to the intent of the rule to control PM emissions from open piles regardless if onsite, on a truck, or other modes of storage, handling or transport, railcar has been added to various sections of the rule. The addition of the word railcar does not trigger new requirements or expand the applicability of existing requirements.

To prevent material from escaping from the mode of transport (e.g., railcar) onto the facility property, other control devices approved by the Executive Officer are currently allowed pursuant to the rule section allowing other devices when maintaining all piles in an enclosed storage. Because the vehicle in which material is transported becomes a stationary pile while onsite, the open transport containment is subject to the same requirements as an open storage pile on the ground. Thus, no

new requirements are triggered and the applicability of existing requirements is not expanded.

Because PAR 1158 is a clarification of existing requirements and allows using an equivalent compliance option for railcars, no PM emission reductions are anticipated.

CHAPTER 2 - ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the PAR 1158.

GENERAL INFORMATION

Project Title:	Proposed Amended Rule 1158– Storage, Handling, and Transport of Coke, Coal and Sulfur
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Michael A. Krause (909) 396-2706
Rule Contact Person:	Pamela Perryman (909) 396-3103
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	The purpose of the currently proposed amendments to Rule 1158 is to clarify rule definitions, add compliance flexibility and clarify rule applicability. To accomplish these objectives, definitions of terms used in the exemption section have been added; definitions have been modified to clarify rule intent; railcar operations not explicitly listed but currently subject to the rule have been added; additional exemptions are provided; and obsolete language has been deleted.
Surrounding Land Uses and Setting:	Not applicable
Other Public Agencies Whose Approval is Required:	Not applicable

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. None of the environmental topics are expected to be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- | | | |
|---|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology and Water Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Solid/Hazardous Waste |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Transportation/Circulation. |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Mandatory Findings |

DETERMINATION

On the basis of this initial evaluation:

- ☒ I find the proposed project, in accordance with those findings made pursuant to CEQA Guideline §15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- ☐ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.

- ☐ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date May 14, 2008

Signature: Steve Smith
Steve Smith, Ph.D.
Program Supervisor
Planning, Rule Development & Area
Sources

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	Potentially Significant Impact	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:			
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

The project will block views from a scenic highway or corridor.

The project will adversely affect the visual continuity of the surrounding area.

The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

Discussion

I. a), b) & c): Rule 1158 is being amended to clarify the intent of the rule and provide compliance flexibility, but will not change rule applicability so no new facilities will be affected. Rule 1158 regulates PM emissions, while PAR 1158 would provide a new alternative compliance method for coal railcars originating outside California. PAR 1158 will not relax existing control requirements as compliance with fugitive dust and opacity limits are still required. PM is the primary element that adversely affects visibility. PAR 1158 improves compliance with the

PM control requirements for railcars so PAR 1158 will be expected to generate the entire amount of daily PM emissions reductions originally anticipated for the rule. To that extent, all PM emission reductions originally anticipated for Rule 1158 are achieved through PAR 1158 and, thus, improvements in visibility would also be expected. Better visibility will improve existing scenic vistas and the existing visual character or quality of areas in the vicinity of affected sites. If the operators of the three affected facilities eligible for the new exemption decide to install the water spray system, the associated construction activities are not expected to be major and, thus, physical changes to existing facilities where the coal railcars originate from outside California are not expected to be substantial. Further, construction equipment and materials might be needed, but because the installation of the water spray system is not expected to take place over a period longer than one or two days, the adverse aesthetic impact is expected to be temporary. As seen in Figure 1-2 the water spray system is not a large apparatus and, thus, the operation of the water spray system will not significantly affect the existing aesthetic setting. Therefore, any potential construction and operation of new equipment as a result of the proposed project would not damage or obstruct scenic resources and the existing visual character of any site in the vicinity of affected industrial facilities will not be degraded.

I. d). There are no components in PAR 1158 that would require construction activities at night. Therefore, no additional lighting at the facility would be required beyond what currently may exist. Similarly, the proposed project has no provisions that would require affected equipment to operate at night. Railyards are already lighted at night and the operation of the water system would not require additional lighting. Therefore, the proposed project is not expected to create a new source of substantial light or glare at an affected facility that would adversely affect day or nighttime views in the area. Therefore, the proposed project is not expected to create significant adverse aesthetic impacts.

Based on the above considerations, significant adverse impacts to aesthetics resources are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES. Would the project:			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

- | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|
| b) | Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) | Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Project-related impacts on agricultural resources will be considered significant if any of the following conditions are met:

The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.

The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.

The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural uses.

Discussion

II. a) - c): Minor construction from the installation of a water spray system will not require converting farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. Since the proposed project would not substantially change the facility or process for which certain coal railcars are stored and handled, there are no provisions in the proposed rule that would affect land use plans, policies, or regulations. Further, additional land would not need to be purchased to install the water spray system. Land use and other planning considerations are determined by local governments and no land use or planning requirements relative to agricultural resources will be altered by the proposed project.

Based on the above considerations, significant adverse impacts to agriculture resources are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
III. AIR QUALITY. Would the project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts will be evaluated and compared to the significance criteria in Table 2-1. If impacts equal or exceed any of the following criteria, they will be considered significant.

TABLE 2-1
Air Quality Significance Thresholds

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants ^d		
NO2 1-hour average annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.25 ppm (state) 0.053 ppm (federal)	
PM10 24-hour average annual geometric average annual arithmetic mean	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation) 1.0 µg/m ³ 20 µg/m ³	
PM2.5 24-hour average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation)	
Sulfate 24-hour average	1 µg/m ³	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (state/federal)	

^a Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

^c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

^d Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

^e Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million $\mu\text{g}/\text{m}^3$ = microgram per cubic meter \geq greater than or equal to

Discussion

Rule 1158 is being amended to clarify the intent of the rule and provide compliance flexibility, but will not change rule applicability so no new facilities will be affected.

PAR 1158 provides an alternative compliance method for coal railcars originating outside California that will provide equivalent emission levels compared to the existing fugitive dust and opacity limits requirements. As discussed in Chapter 1, fine PM emissions from coal in railcars originating outside California are expected to be dispersed early in the journey so no PM emissions are likely to be generated when the coal is being transported in open railcars across the Basin. Upon arrival at a permitted facility in the Basin, the coal railcar is currently required to be covered with a tarp or solid cover to prevent airborne PM and reentrainment. The amendment will exempt coal railcars originating outside California from covering with a tarp or solid cover as long as the coal is moistened and still complies with fugitive dust and opacity limits. In order to ensure the coal is moistened, the affected facilities would need to install a water spray system at the entrance of the facility site. Three known facilities in the Basin could take advantage of the new exemption. Only one water spray system for each facility would be necessary for the one dedicated rail track currently onsite. Construction of the new water spray system could generate potential air quality impacts. With regard to the other modifications to Rule 1158, no new requirements are triggered and the applicability of existing requirements is not expanded.

III. a): PAR 1158 would not conflict with or obstruct the applicable air quality plan implementation. The primary purpose of the SCAQMD's AQMP is to control emissions and to attain and maintain all federal and state ambient air quality standards for the district. The 2007 AQMP concluded that major reductions in emissions of VOC, NO_x and PM are necessary to attain the air quality standards for ozone and PM_{2.5}. The proposed requirements in PAR 1158 would clarify the intent of Rule 1158 to ensure that all originally anticipated PM emission reductions are achieved, which furthers the emission reduction goals of the 2007 AQMP.

III. b) & d): Implementing PAR 1158 could result in the installation of one or more water spray systems at three affected facilities. The new exemption is an alternative compliance option, which is voluntary and not a requirement. If a facility operator is covering the coal railcar originating outside California, then a water spray system is not required. However, for a “worst-case” scenario, the following analysis assumes that facility operators prefer the water spray system and would not cover the coal railcar originating outside California. Although an employee is needed to activate the water, however, an additional permanent employee to conduct this operation is not expected to be necessary as the delivery frequency is typically one out-of-state train of coal per week.

Construction Impacts

The installation of a water spray system (or any other similar moistening device) would likely take place in two phases: transport/delivery of equipment and installation/water activation. In some cases, a facility operator may choose to install an underground water system to transport water from the source to the water bar.

Thus, a third phase was evaluated to account for trenching, piping and paving for this scenario. Finally, a facility operator may have to reinforce the existing rail tracks to support the foundation, which may be vulnerable to deterioration from overspray of the water spray system. A fourth phase scenario examines impacts from such activity. Construction phases typically occur on different days because of the different nature of the activities, the unknown origin and location of the equipment, and the fact that the installation phase will require a full eight hours, which means that other construction phases would not occur on the same eight-hour day. An on-road vehicle will be required for delivery of material needed to construct the water spray system. Unloading the equipment is assumed to be conducted by a forklift and two workers to conduct the unloading task.

Off-road equipment needed to install the spray bar and water system would include a forklift, welder, and a generator set. It is assumed the equipment will be utilized for the whole eight-hour day to complete the task for each affected facility. Four workers would be needed to perform the installation task of constructing the water spray bar over the railcar tracks and hooking up the water conduit. Mobile source emissions will be generated from the vehicles driven by these construction workers to and from the site.

Installing an underground water piping system would involve trenching or earth moving in the appropriate area, dropping the piping, hooking up to both the source and the water spray system, and re-paving the surface using paving equipment, rollers and cement mixers. Due to the minimal size of the water spray system, the activity is not expected to take place longer than one day. Four construction workers would be expected to complete the task.

To secure the foundation under the existing rail track in the area of the water spray system would involve equipment, such as a forklift, to raise up the rail tracks and cement equipment to repave and secure the surface. The four construction workers are expected to complete the task in one day as the area around the water spray system is not a large region.

Table 2-2 summarizes the emissions from each of the construction phases on a given day. As noted in Table 2-2, the peak emissions are experienced from different activities for each of the criteria pollutants. For example, NO_x emissions peak during the installation of the water spray system, while PM₁₀ emissions peak during both the installation of underground water piping and installation of the new foundation. While unlikely, the “worst-case” scenario that all three facilities will install the water spray system on the same day is calculated in Table 2-2. Since the activity from the three activities could be staggered on a given day, the peak emission from each criteria pollutant was used to compare to the SCAQMD daily construction significance thresholds and determine significance. The detailed calculations, along with the off-road and on-road emission factors, can be found in Appendix B.

TABLE 2-2**Construction Emissions from Delivering and Installing Water Spray System**

Activity	CO (lbs/day)	NO_x (lbs/day)	PM₁₀ (lbs/day)	PM_{2.5} (lbs/day)	VOC (lbs/day)	SO_x (lbs/day)
Delivering the Equipment	1.8	2.3	0.1	0.1	0.3	0.003
Installing the Water Spray System	7.6	13.6	0.9	0.8	2.4	0.014
Installing Underground Water Piping	8.1	13.4	13.0	11.9	2.5	0.013
Installation of New Foundation For Rail Tracks (Under Water Spray System)	7.3	12.7	12.8	11.8	2.2	0.013
PEAK Daily Construction Emissions	8.1	13.6	13.0	11.9	2.5	0.014
TOTAL Daily Construction Emissions for Three Installations	24.3	40.8	39	35.7	7.5	0.04
SCAQMD Daily Construction Significance Thresholds	550	100	150	55	75	150
Significant?	No	No	No	No	No	No

As noted in Table 2-2, the peak daily emissions from the construction scenarios as a result of the proposed project would not exceed the SCAQMD's daily air quality significance thresholds during the construction phase. Thus, implementing PAR 1158 will not have a significant air quality impact from construction.

Operational Phase

The operation of the water spray system is not expected to worsen current operational air quality impacts, but rather maintain the same level of PM emissions reductions from exposed coal beds. No additional permanent employees are expected to be needed to activate the water spray system as the out-of-state coal train deliveries occur once a week and do not need constant monitoring while being passed under the water spray bar. The proposed project would not violate any ambient air quality standards, but would assist in continuing to reduce PM emissions, which will assist the district in attaining state and national PM standards. Thus, ambient air quality standards are not anticipated to be violated nor will the proposed project generate any emissions that would exceed any of the significance thresholds in Table 2-1.

III. c): **Cumulative Impacts:** Since PAR 1158 is not expected to generate potentially significant adverse project-specific construction or operational air quality impacts, the proposed project's contribution to a potentially significant cumulative impact during operation is rendered less than cumulatively considerable and, thus, is not significant (CEQA Guidelines §15064(h)(2)). With regard to other projects in the vicinity occurring at the same time as this project, CEQA Guidelines §15064(h)(4) states "the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable."

Greenhouse Gases /Climate Change

Global climate change refers to changes in average climatic conditions on earth as a whole, including temperature, wind patterns, precipitation and storms. Global warming, a related concept, is the observed increase in average temperature of the earth's surface and atmosphere. One identified cause of global warming is an increase of GHGs in the atmosphere. The six major GHGs identified by the Kyoto Protocol are CO₂, methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), haloalkanes (HFCs), and perfluorocarbons (PFCs). The GHGs absorb longwave radiant energy reflected by the earth, which warms the atmosphere. GHGs also radiate longwave radiation both upward to space and back down toward the surface of the earth. The downward part of this longwave radiation absorbed by the atmosphere is known as the "greenhouse effect." The potential effects of global climate change may include rising surface temperatures, loss in snow pack, sea level rise, more extreme heat days per year, and more drought years.

CO₂ is an odorless, colorless natural greenhouse gas. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (human caused) sources of CO₂ are from burning coal, oil, natural gas, wood, butane, propane, etc. CH₄ is a flammable gas and is the main component of natural gas. N₂O, also known as laughing gas, is a colorless greenhouse gas. Some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to the atmospheric load of GHGs. HFCs are synthetic man-made chemicals that are used as a substitute for chlorofluorocarbons (whose production was stopped as required by the Montreal Protocol) for automobile air conditioners and refrigerants. The two main sources of PFCs are primary aluminum production and semiconductor manufacture. SF₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Events and activities, such as the industrial revolution and the increased combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.), have heavily contributed to the increase in atmospheric levels of GHGs. As reported by the California Energy Commission (CEC), California contributes 1.4 percent of the global and 6.2 percent of the national GHGs emissions (CEC, 2004). The GHG inventory for California is presented in Table 2-3 (CARB, 2007). Approximately 80 percent of GHGs in California are from fossil fuel combustion and over 70 percent of GHG emissions are carbon dioxide emissions (see Table 2-3).

TABLE 2-3

California GHG Emissions and Sinks Summary
(Million metric tons of CO₂ equivalence)

Categories Included in the Inventory	1990	2004
<u>ENERGY</u>	386.41	420.91
<i>Fuel Combustion Activities</i>	381.16	416.29
Energy Industries	157.33	166.43
Manufacturing Industries & Construction	24.24	19.45
Transport	150.02	181.95
Other Sectors	48.19	46.29
Non-Specified	1.38	2.16
<i>Fugitive Emissions from Fuels</i>	5.25	4.62
Oil and Natural Gas	2.94	2.54
Other Emissions from Energy Production	2.31	2.07
<u>INDUSTRIAL PROCESSES & PRODUCT USE</u>	18.34	30.78
Mineral Industry	4.85	5.90
Chemical Industry	2.34	1.32
Non-Energy Products from Fuels & Solvent Use	2.29	1.37
Electronics Industry	0.59	0.88
Product Uses as Substitutes for Ozone Depleting Substances	0.04	13.97
Other Product Manufacture & Use Other	3.18	1.60
Other	5.05	5.74
<u>AGRICULTURE, FORESTRY, & OTHER LAND USE</u>	19.11	23.28
Livestock	11.67	13.92
Land	0.19	0.19
Aggregate Sources & Non-CO ₂ Emissions Sources on Land	7.26	9.17
<u>WASTE</u>	9.42	9.44
Solid Waste Disposal	6.26	5.62
Wastewater Treatment & Discharge	3.17	3.82
EMISSION SUMMARY		
Gross California Emissions	433.29	484.4
Sinks and Sequestrations	-6.69	-4.66
Net California Emissions	426.60	479.74

Source: CARB, 2007.

The analysis of GHGs is a much different analysis than the analysis of criteria pollutants for the following reasons. For criteria pollutants significance thresholds are based on daily emissions because attainment or non-attainment is based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects on human health, e.g., one-hour and eight-hour. Since the half-life of CO₂ is approximately 100 years, for example, the effects of GHGs are longer-term, affecting global climate over a relatively long time frame. As a result, the SCAQMD's current position is to evaluate GHG effects over a longer timeframe than a single day. GHG emissions in the form of CO₂ will be generated by the off-road equipment and on-road vehicles during the construction phase of the project. CO₂ emissions were estimated using emission factors from CARB's EMFAC2007 and OFFROAD2007 models and EPA's AP-42. The CO₂ emission factors and calculations can be found in the emission calculation spreadsheets in Appendix B.

The construction phase during which CO₂ emissions would be generated from mobile source construction equipment and on-road vehicles is expected to take place in less than a week period of time per facility. Table 2-4 provides the CO₂ emissions from each of the construction phases and, as a worst-case scenario, adds the emissions from all three applicable facilities although it is unlikely that all three applicable facilities would need to do all four activities evaluated. CO₂ emissions would occur on a daily basis, but emissions from different phases occur over more than one day. The total CO₂ emissions in Table 2-4 are the sum of all daily GHG emissions. The sum of the daily GHG emissions equals the annual emissions. GHG emissions are annualized because this is the typical currency in which GHG emissions are expressed. Due to its long half life, CO₂ emissions in Table 2-4 are not provided a time unit.

TABLE 2-4
CO₂ Emissions from Construction Phases

Activity	CO₂ Emissions (lbs) Per Facility	CO₂ Emissions (lbs) From All Three Facilities	TOTAL CO₂ Emissions (metric tons)
Delivering the Equipment	262	786	0.36
Installing the Water Spray System	1,216	3,648	1.66
Installing Underground Water Piping	1,030	3,090	1.40
Installation of New Foundation For Rail Tracks (Under Water Spray System)	1,017	3,051	1.39
TOTAL CO₂ Emissions from Three Applicable Facilities	3,525	10,575	4.8

As shown in Table 2-4, if all three applicable facility operators choose to install the water spray system to qualify for the exemption from covering or tarping the coal railcar originating outside California and conduct all other activity such as installing underground water piping and a new foundation, the maximum CO₂ emissions would be under five metric tons.

The operational phase of implementing the proposed project would result in no change or increase in CO₂ emissions as the operation of the water spray system does not generate CO₂ emissions.

An increase in GHG emissions of five metric tons from the construction phase of the proposed project would be less than significant for the following reasons. Neither SCAQMD nor any other air regulatory agency in California has established a significance threshold for GHG emissions yet. In the absence of a specific significance threshold, SCAQMD staff has evaluated GHG significance for projects where it is the lead agency on a case-by-case basis. In this analysis, SCAQMD staff has used a variety of benchmarks to evaluate GHG impacts. As additional information is compiled with regard to the level of GHG emissions that constitute a significant cumulative climate change impact, SCAQMD will continue to revisit and possibly revise the level of GHG emissions considered to be significant.

In its CEQA & Climate Change document (January, 2008), CAPCOA identifies many potential GHG significance threshold options. The CAPCOA document indicates that establishing quantitative thresholds is a balance between setting the level low enough to capture a substantial portion of future residential and non-residential development, while also setting a threshold high enough to exclude small development projects that will contribute a relatively small fraction of the cumulative statewide GHG emissions. For example, CAPCOA identifies one potential significance threshold as 10,000 metric tons per year, which was considered by the Market Advisory Committee for inclusion in a Greenhouse Gas Cap and Trade System in California. Another potential threshold identified by CAPCOA is 25,000 metric tons per year, which is CARB's proposed mandatory reporting threshold under AB 32. GHG emissions increase from the proposed project for PAR 1158 would be substantially lower than both of these reporting thresholds.

Finally, another approach to determining significance is to estimate what percentage of the total inventory of GHG emissions are represented by emissions from a single project. If emissions are a relatively small percentage of the total inventory, it is possible that the project will have little or no effect on global climate change. According to available information, the statewide inventory of CO₂eq. emission is as follows: 1990 GHG emissions were estimated to equal 427 million metric tons of CO₂eq. and 2020 GHG emissions are projected to equal 600 million metric tons of CO₂eq. under a business-as-usual scenario. Interpolating an inventory for the year 2008 (time of construction) results in an estimated inventory of approximately 531 million metric tons of CO₂eq. CO₂ emissions in 2008 of five metric tons from PAR

1158 represent 0.0000009 percent of the statewide GHG inventory in 2010. This small percentage of GHG emissions compared to the total projected statewide GHG emissions inventory is another basis for the SCAQMD's conclusion that GHG emissions from implementing PAR 1158 are less than significant.

PAR 1158 is part of a comprehensive ongoing regulatory program that includes implementing related SCAQMD 2007 AQMP control measures, existing rules as amended or new rules to attain and maintain with a margin of safety all state and national ambient air quality standards for all areas within its jurisdiction. The 2007 AQMP estimates a CO₂ reduction of 427,849 metric tons per year by 2014, and a CO₂ reduction of 1,523,445 metric tons per year by 2020. Therefore, PAR 1158 in connection with other 2007 AQMP control measures is not considered to be cumulatively significant.

Since GHG emissions are considered cumulative impacts, and PAR 1158 GHG emissions are below the 10,000 metric ton per year Market Advisory Committee threshold, 25,000 metric ton per year CARB proposed mandatory reporting threshold under AB 32, a small percentage of the total statewide GHG inventory in 2014, and, with other control measures in the 2007 AQMP, which is a comprehensive ongoing regulatory program that would reduce overall CO₂ emissions; cumulative GHG adverse impacts from PAR 1158 are not considered significant.

III. e): Noticeable odors from diesel fueled construction equipment are not expected to be generated during the construction period to install the water spray because of the small number of construction equipment needed to install the system. No objectionable odors will be generated from the operation of the water spray system and, thus, potential odor impacts will result from the proposed project.

III. f): The proposed project will clarify existing rule requirements and provide an alternative compliance option subject to existing fugitive and opacity requirements to restrict backsliding or increasing PM emissions. Thus, the proposed project will not diminish an existing air quality rule or future compliance requirements.

Based on the above considerations, significant adverse impacts to air quality are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Significance Criteria

Impacts on biological resources will be considered significant if any of the following criteria apply:

The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.

The project interferes substantially with the movement of any resident or migratory wildlife species.

The project adversely affects aquatic communities through construction or operation of the project.

Discussion

IV. a), b), d): The proposed project is not expected to require any major construction activities from the installation of water spray system as discussed in Section III. Air Quality. Installation of the system, which is basically three bars and approximately nine water nozzles, is expected to require no more than four to six construction workers, four to five pieces of equipment and each construction phase can generally be completed in one day. The water spray system is expected to be placed on the established site as the railcar enters the property. Similarly, the proposed project will not require the construction of new structures on property not already established with a foundation although minor foundation work may be necessary to stabilize rail tracks. Therefore, PAR 1158 will have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely in the SCAQMD's jurisdiction. PAR 1158 will primarily affects coal railcars originating outside California and will not worsen the current operation or worsen present conditions of plant and animal life. Further, PAR 1158 does not require acquisition of additional land or further conversions of riparian habitats or sensitive natural communities where endangered or sensitive species may be found. Any changes to the existing physical environment would occur for business reasons, not as a result of implementing PAR 1158.

IV. c): Acquisition of protected wetlands is not expected to be necessary to moisten coal railcars originating outside of California. Operators of affected railcars would install a water spray system on the established facility so no new property is required for installation and operation. Thus, the alternative compliance option is not

expected to require removing, filling or interrupting any hydrological system or have an adverse effect on federally protected wetlands.

IV. e), f): There are no provisions in the proposed project that would adversely affect land use plans, local policies or ordinances, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project. PAR 1158 would not affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities.

Based on the above considerations, significant adverse impacts to biological resources are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside a formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to cultural resources will be considered significant if:

The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.

Unique paleontological resources are present that could be disturbed by construction of the proposed project.

The project would disturb human remains.

Discussion

V. a) - d): There are existing laws in place that are designed to protect and mitigate potential impacts to cultural resources. Operators of existing affected facilities that receive coal rail cars may be required to perform minor construction activities such as grading, trenching, etc., to comply with the proposed project. Any grading or trenching activities would occur at sites already substantially disturbed as a result of constructing and operating the railyard. Further, no new property is required for water spray system installation and operation because the water spray system is expected to be installed in the same location as where the existing rail tracks enter the affected facility. Therefore, cultural resources are not expected be disturbed in any way. As a result, the proposed project has no potential to cause a substantial adverse change to a historical or archaeological resource, directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or disturb any human remains, including those interred outside a formal cemeteries.

The proposed project activities will occur in areas of the affected facilities where the ground surface has already been disturbed, and this past disturbance reduces the likelihood that previously unknown cultural resources will be encountered. If cultural or archaeological resources were to be encountered unexpectedly during ground disturbance associated with construction of the water spray system or stabilization of the rail tracks, proper procedures (i.e., contacting professional archaeologist, temporarily halting disturbance work in vicinity, etc.) will be taken.

Based on the above considerations, significant adverse impacts to cultural resources are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:			
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to energy and mineral resources will be considered significant if any of the following criteria are met:

The project conflicts with adopted energy conservation plans or standards.

The project results in substantial depletion of existing energy resource supplies.

An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.

The project uses non-renewable resources in a wasteful and/or inefficient manner.

Discussion

VI. a), e): The proposed project clarifies existing rule requirements, provides compliance flexibility, does not require electricity nor is it expected to change current energy needs at affected facilities. Therefore, PAR 1158 will not conflict with adopted energy conservation plans. Affected facilities would still be expected to comply with any existing energy conservation plans or energy standards, to the extent that affected engines are subject to such plans or standards.

VI. b), c), d): Implementation of PAR 1158 will not result in the need for new or substantially altered power or natural gas utility systems. Effects of the proposed project on the electricity capacity are not expected to occur because activity at affected facilities is not expected to change as a result of clarifying existing rule requirements or providing compliance flexibility. Thus, no increase their operations is expected, so no significant adverse impacts on peak or base demands for electricity are anticipated.

Based on the above considerations, significant adverse impacts to energy are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS.	Would the project:			
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<ul style="list-style-type: none"> Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<ul style="list-style-type: none"> Strong seismic ground shaking? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<ul style="list-style-type: none"> Seismic-related ground failure, including liquefaction? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<ul style="list-style-type: none"> Landslides? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(1994), creating substantial risks to life or property?

- | | | | | |
|----|---|--------------------------|--------------------------|-------------------------------------|
| e) | Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|-------------------------------------|

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.

Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.

Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.

Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.

Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

Discussion

VII. a): Water spray systems will be installed at existing affected facilities so PAR 1158 will not expose people to substantial geological effects greater than what they are exposed to already. Since the proposed project will not require acquisition of new property that has not already been developed, PAR 1158 will not expose people or structures to new risks of loss, injury, or death involving: rupture of an earthquake fault, seismic ground shaking, ground failure or landslides.

VII. b): The proposed project may require minor construction activities (e.g., grading, trenching, or refilling) as affected facilities have already been developed, so potential impacts to existing geophysical conditions are not anticipated since little or no soil will be disrupted. Therefore, no substantial soil erosion or loss of topsoil is expected from the existing affected facilities as a result of providing an alternative compliance option to covering the coal railcar originating outside California. Water from the spray system is not expected to create soil erosion problems because small volumes

of water are sprayed on each rail car (approximately 100 gallons of water per day at each affected facility), most of the water is sprayed into the railcar rather than onto the ground, and most affected facilities are already paved. Any soil disturbance that does occur will be subject to the dust control requirements of SCAQMD Rule 403, which would minimize any wind erosion.

VII. c) & d): PAR 1158 would provide an additional compliance option for coal railcars arriving at existing affected facilities and, therefore, will not involve locating any structures on soil that is unstable or expansive. However, as already noted, little or no new soil disturbance is anticipated from the proposed project, therefore, no further destabilization of unstable soils would be expected that could cause on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse.

VII. e): The proposed project does not involve the installation of septic tanks or alternative waste water disposal systems. Therefore, this type of soil impact will not occur.

Based on the above considerations, significant adverse impacts to geology and soils are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | | |
|----|---|--------------------------|--------------------------|-------------------------------------|
| d) | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) | For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) | Significantly increased fire hazard in areas with flammable materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

Non-compliance with any applicable design code or regulation.

Non-conformance to National Fire Protection Association standards.

Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.

Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

Discussion

VIII. a), b), & c): The proposed project does not require the routine transport, use, or disposal of hazardous materials. If an affected facility operator decides to install and operate a water spray system as an alternative compliance option to covering the coal railcar originating outside California, no waste is generated. It is anticipated that, because the project does not involve the transport, use, or disposal of hazardous materials, the proposed project will not create a significant new hazard to the public or create a reasonably foreseeable upset conditions involving the release of hazardous materials greater than existing conditions. Finally, PAR 1158 would not require the use of equipment that has the potential to emit hazardous materials.

VIII. d): Government code §65962.5 refers to hazardous waste handling practices at facilities subject to the Resources Conservation and Recovery Act (RCRA). If any affected facilities are identified on such a list, compliance with the proposed project is not expected to affect in any way any facility's hazardous waste handling practices.

VIII. e) & f): The three affected facilities are located in the port area which is four to five miles from both the Long Beach Municipal Airport and Torrance Municipal Airport – Zamperini Field. Because none of the affected facilities are within two miles of an airport or private airstrips, the proposed project would have no potential to affect local airports or private airstrips.

VIII. g): The proposed project is expected to require minor modifications to install and operate the water spray system. Such activities are not likely to impose any new emergency conditions at the facility that would warrant amendments to adopted emergency response plans or emergency evacuation plans, nor would the proposed project be expected to physically interfere with implementing adopted emergency response plans or emergency evacuation plans.

VIII. h,) & i): Because the alternative compliance option of installing water spray systems would occur at existing facilities on established foundations in commercial or industrial areas, PAR 1158 is not expected to expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands to a greater extent than is currently the case. Because coal railcar operations are not expected to change substantially, there will be no significant increase of fire hazards in areas with flammable materials greater than whatever currently exists already. Because PAR 1158 could involve greater use of water, it may have a minor benefit of reducing existing fire hazards.

Based on the above considerations, significant adverse hazards and hazardous materials impacts are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY.			
Would the project:			
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

f)	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j)	Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
l)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
m)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
n)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o)	Require in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Quality:

The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.

The project will cause the degradation of surface water substantially affecting current or future uses.

The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.

The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.

The project results in alterations to the course or flow of floodwaters.

Water Demand:

The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.

The project increases demand for water by more than five million gallons per day.

Discussion

IX. a), f): PAR 1158 will have no direct or indirect adverse impact on water quality because operators at affected facilities are not expected to violate water quality standards, water discharge requirements or substantially degrade water quality when operating water spray systems to moisten coal in railcars. The reason for this conclusion is that the water spray system uses such small volumes of water per railcar, most of the water is sprayed into the railcar and, because so little water is used per railcar, the water is expected to evaporate before it could migrate into

groundwater supplies. Other parts of PAR 1158 will merely clarify existing requirements, which have no effect on water quality.

IX. b), n), & o): Operators who choose to install water spray systems would increase demand for water demand as a result of using water to moisten the coal on railcars originating outside California. PAR 1158 is not expected to deplete groundwater supplies as the water demand needed to operate the water spray system is expected to be met with existing water supplies from the same source currently providing water to the existing affected facility operation. As depicted in Figure 1-2, the water spray system is expected to have a series of nozzles with the capability of spraying 5.5 gallons per minute. Railcars entering the facility travel at approximately five miles per hour (440 feet per minute). Railcars are typically 60 feet in length and, thus, it takes 0.136 minute (60/440) for a railcar to pass a stationary point (i.e., water spray bar). Spraying at 5.5 gallons per minute, less than one gallon of water (5.5/0.136) is released as one railcar passes under the water bar. Trains transporting coal can consist of up to 100 railcars, although one facility reported only 20 to 40 railcars per train. Assuming the “worst case” of 100 railcars per train, less than 100 gallons of water could be discharged for each coal train entering the affected facility. Coal railcar deliveries average one per week so only one train would arrive on a given day. To provide a “worst-case” scenario, it is assumed a coal train will arrive at all three affected facilities on the same day demanding 300 gallons or less of water per day.

Water demand from the proposed project of 300 gallons of water per day would be substantially less than the SCAQMD daily water demand significance threshold of five million gallons per day and, thus, water demand impacts from implementing the alternative compliance option is considered to be less than significant.

IX. c), d), e): The proposed project would primarily involve the installation of a basic water spray system to moisten coal in certain railcars at existing facilities. Because the proposed project is not expected to require major construction activities onsite to comply with PAR 1158, small amounts of water may be required for dust control. However, because it is only necessary to moisten the soil to create a crust and such small areas would be disturbed, water use during construction is not expected to be substantial.

Water is expected to strictly moisten the coal, so the proposed project will not alter any existing drainage patterns, increase the rate or amount of surface runoff water that would exceed the capacity of existing or planned stormwater drainage systems for the following reasons. Water from the spray system is not expected to create soil erosion problems because small volumes of water are sprayed on each rail car (approximately 100 gallons of water per day at each affected facility), most of the water is sprayed into the railcar rather than onto the ground, and most affected facilities are already paved.

IX. g) & h): PAR 1158 does not involve construction of housing so it will not result in placing housing in 100-year flood hazard areas that could create new flood hazards or impede or redirect flood flows. The proposed project would primarily involve the installation of a basic water spray system to moisten coal in certain railcars at existing facilities so any flood hazards would be part of the existing setting.

IX. i), j): Since PAR 1158 primarily clarifies existing requirements or involves the installation and operation of a basic water spray system to moisten coal in certain railcars at existing facilities, it will not create new flood risks or risks from seiches, tsunamis or create mudflow conditions. Any risks from seiches, tsunamis, or mudflows would be part of the existing setting. Further, affected facilities are not located near large bodies of water, so they generally would not be affected by seiches or tsunamis. In addition, affected facilities are located in flat areas that are not expected to be affected by mudslides.

IX. k): Because the water is expected to strictly moisten the coal and not generate wastewater, no changes to any existing wastewater treatment permits would be necessary. As a result, the proposed project is not expected to alter any affected facility's ability to comply with existing wastewater treatment requirements or conditions from any applicable Regional Water Quality Control Board or local sanitation district.

IX. l) & m): Because the water is expected to strictly moisten the coal and not generate wastewater [see discussion IX b), n), & o)] , no increase in wastewater from complying with the proposed project that could exceed the capacity of existing stormwater drainage systems or require the construction of new wastewater or stormwater drainage facilities is anticipated.

Based on the above considerations, significant adverse impacts to hydrology and water quality are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:			
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan,	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

- c) Conflict with any applicable habitat conservation or natural community conservation plan? ☐ ☐ ☒

Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

Discussion

X. a.): PAR 1158 will not create divisions in any existing communities because the proposed project will clarify existing requirements and would primarily affect existing facilities that must comply with any land use policies or local zoning regulations. Similarly, the alternative compliance option to install and operate a water spray system to moisten coal in railcars originating outside California will affect operations at existing facilities and would not require construction of facilities, such as freeways, that would not physically divide an established community. The water spray system is expected to be installed in the location of the existing rail track entering the facility.

X. b), c): Operations at affected facilities would still be expected to comply, and not interfere, with any applicable land use plans, zoning ordinances, habitat conservation or natural community conservation plans. There are no provisions of the proposed project that would directly affect these plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no present or planned land uses in the region or planning requirements will be altered by the proposed project.

Based on the above considerations, significant adverse impacts to land use and planning are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion

XI. a), b): There are no provisions of the proposed rule that would directly result in the loss of availability of a known mineral resource, such as aggregate, coal, shale, etc., of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Further, installing and operating a water spray system would not change an existing uses of the mineral resources by facilities that must comply with the proposed project.

Based on the above considerations, significant adverse impacts to mineral resources are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airship, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on noise will be considered significant if:

Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise

levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.

The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion

XII. a), b), c) & d): PAR 1158 primarily clarifies existing requirements and provides an alternative compliance option to covering coal railcars originating outside California. The alternative compliance option to moisten the coal will require a water spray system at the entrance of the facility to ensure compliance with existing fugitive and opacity requirements. Operation of water spray system is not expected to generate additional or new noise, excessive groundborne vibration, or substantially increase ambient noise levels beyond existing levels because water sprays are not typically noise intensive. Construction equipment, however, does generate noise. These noise levels are not expected to be significant because construction activities will be short in duration, i.e., three to four days at the three affected sites, no more than three to five small pieces of construction equipment are needed during any one construction phase, and contractors are expected to comply with local noise ordinances and allowable operating hours during the construction phase.

As a result, the proposed project is not expected to generate new or additional noise impacts beyond what currently existing at affected facilities.

XII. e) & f): As indicated previously, the three affected facilities are located in the port area which is four to five miles from both the Long Beach Municipal Airport and Torrance Municipal Airport – Zamperini Field. Because none of the affected facilities are within two miles of an airport or private airstrips, the proposed project would have no potential to affect local airports or private airstrips.

Based on the above considerations, significant adverse impacts to noise are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING. Would the project:			
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

The demand for temporary or permanent housing exceeds the existing supply.

The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

Discussion

XIII. a), b), c): Human population in the SCAQMD's jurisdiction is anticipated to grow regardless of implementing the proposed project. The alternative compliance option will require minimal employees for construction since a water spray system is a basic and simple design and, thus, not labor intensive. Construction workers to build the water spray system would be needed on a temporary basis, i.e., no more than three or four days at each affected facility, and are expected to come from the existing labor force in the region. Additional permanent employees would not be required during operation because the operation requires only the activation of water and only one coal train is expected per week at each affected facility. District population will not be affected directly or indirectly as a result of adopting and implementing the proposed project. Further, continuing the control of PM emissions

will not directly or indirectly induce growth in the area of affected facilities. The construction of single- or multiple-family housing units would not be required as a result of implementing the proposed project since no new employees will be required at affected facilities. The proposed project will not require relocation of affected facilities, so existing housing or populations in the district are not anticipated to be displaced necessitating the construction of replacement housing elsewhere.

Based on the above considerations, significant adverse impacts to population and housing are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:			
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

Discussion

XIV. a) & b): PAR 1158 will not involve the use of acutely hazardous materials. As a result, no new fire hazards or increased use of hazardous materials would be introduced at existing affected facilities. Thus, no new demands for fire or police protection are expected from implementing PAR 1158 since the proposed project will not require equipment that use or generate hazardous materials that will require additional public services in the event of an emergency.

XIV. c), d): As noted in the “Population and Housing” discussion, implementing PAR 1158 will not require new permanent employees for construction because no major construction is necessary to comply with the proposed project. Similarly, no new permanent employees will be required to maintain operation of the water spray system. As a result, PAR 1158 will have no direct or indirect effects on population growth in the district. Consequently, no new impacts to schools, parks or other recreational facilities are foreseen as a result of implementing PAR 1158.

XIV. e): Because the future installation of water spray system only requires minor modifications at the affected facilities, the proposal would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times or other performance objectives.

Based on the above considerations, significant adverse impacts to public services are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XV. RECREATION.			
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to recreation will be considered significant if:

The project results in an increased demand for neighborhood or regional parks or other recreational facilities.

The project adversely effects existing recreational opportunities.

Discussion

XV. a) & b): As discussed under “Land Use and Planning” above, there are no provisions in the proposed project that would affect land use plans, policies or ordinances, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by the proposal. As already noted in item XII, Population and Housing, the proposed project is not expected to increase population growth in the district because no additional permanent employees would be required for the operation of affected facilities, so no additional demand for recreation facilities is anticipated. As noted earlier, the additional construction workers needed would be temporary and expected to come from the existing labor force in the region, which would not increase the use of existing neighborhood and regional parks or other recreational facilities or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Based on the above considerations, significant adverse impacts to recreation are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVI. SOLID/HAZARDOUS WASTE. Would the project:			
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

The proposed project impacts on solid/hazardous waste will be considered significant if the following occur:

The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion

XVI. a), b): PAR 1158 clarifies existing rule requirements and provides an alternative compliance option that will not generate or require the disposal of hazardous or non-hazardous waste during either construction or operation. Thus, disposal capacity of local landfills would not be affected by the proposed project in any way. It is expected that PAR 1158 will have no effect on an operator's ability to comply with relevant statutes and regulations related to solid and hazardous wastes. Consequently, it is anticipated that operators of affected facilities would continue to comply with federal, state, and local statutes and regulations related to solid and hazardous waste handling and disposal. Therefore, potential solid waste impacts are considered not significant.

Based on the above considerations, significant adverse solid/hazardous waste impacts are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/CIRCULATION			
Would the project:			
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

level of service standard established by the county congestion management agency for designated roads or highways?

- | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|
| c) | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) | Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) | Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) | Result in inadequate parking capacity? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) | Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Impacts on transportation/traffic will be considered significant if any of the following criteria apply:

Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.

An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.

A major roadway is closed to all through traffic, and no alternate route is available.

There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.

The demand for parking facilities is substantially increased.

Water borne, rail car or air traffic is substantially altered.

Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.

The need for more than 350 employees

An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day

Increase customer traffic by more than 700 visits per day.

Discussion

XVII. a), b), f): As noted in the “Discussion” sections of other environmental topics (see in particular III. Air Quality), compliance with PAR 1158 is not expected to require major construction to install water spray systems, e.g., site preparation, construction, etc. PAR 1158 could result in delivery of equipment or additional construction worker commute trips for workers installing the water spray system if a facility operator chooses the alternative compliance option. Each construction phase is expected to be completed in one day. For the delivery and unloading of the equipment, one delivery truck round trip and up to two construction worker vehicle round trips per day are expected to occur for a maximum of three round trips per facility per day. If all three affected facilities choose to deliver the water spray system on same day, there would be nine trips on a given day. For the installation of the water spray system, a maximum of six construction workers would be necessary, so during system installation a maximum of six construction worker commute trips per day would be expected to occur at each facility. Thus, the total for all three facilities, if installing on the same day, is 18 trips on given day. This increase would not exceed the significance thresholds of 350 employees per project or 350 truck round trips per day for any individual facility. Six temporary employees at each affected facility for a short duration, three to four days, would have no adverse impact on existing parking conditions and capacity.

Because the affected facilities are located throughout the district, no intersections or major arterials are expected to experience overlapping traffic impacts during construction at the three affected facilities that could cause a substantial change in traffic that would significantly affect levels of service or congestion. Traffic in the vicinity of each affected facility will not be affected during operation. Facilities would not be expected to generate any new trips because no new permanent employees are expected to be required to operate the water spray system.

Thus, impact to existing traffic, level of service and parking capacity is not expected to substantially worsen by the proposed project.

XVII. c): Air traffic patterns are not expected to be directly or indirectly affected by the proposed project because water spray systems do not require transport by air nor

will operation of existing affected facilities interfere with air traffic in any way. All applicable local, state and federal requirements would continue to be complied with so no increase in any safety risks is expected.

XVII. d), e): PAR 1158 does not have direct or indirect impacts on specific traffic design features because the proposed project does not require or induce the construction of any roadways or other transportation design features. In addition, PAR 1158 would not substantially change current operations at existing affected facilities, which would also not affect roadway design.

XVII. g): Affected facilities would still be expected to comply with, and not interfere with adopted policies, plans, or programs supporting alternative transportation. Since no new additional permanent employees are needed to operate in compliance, PAR 1158 will not hinder compliance with any applicable alternative transportation plans or policies.

Based on the above consideration, significant adverse impacts to transportation/circulation are not expected from implementing PAR 1158. Since there are no significant adverse impacts, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

with the effects of past projects, the effects of other current projects, and the effects of probable future projects)

- c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? ☐ ☐ ☒

Discussion

XVIII. a): As discussed in items I through XVII above, PAR 1158 is expected to continue to reduce PM emissions during storage, handling and transport of coal, coke and sulfur. Therefore, the proposed project is beneficial to air quality and the environment. Because PAR 1158 would not require acquisition of land and because it would not require major construction activities at the three existing affected facilities, PAR 1158 is not expected to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal. Similarly, PAR 1158 would not eliminate important examples of the major periods of California history or prehistory or otherwise degrade cultural resources because the proposed project is expected to affect existing facilities that have already been disrupted due to past construction and operation of the facility.

XVIII.b) Since PAR 1158 are not expected to generate potentially significant adverse project-specific construction or operational impacts to any environmental topic areas evaluated in this checklist, the proposed project's contribution to potentially significant adverse cumulative impacts during construction or operation is rendered less than cumulatively considerable and, thus, is not cumulatively significant (CEQA Guidelines §15064(h)(2)).

XVIII.c) Based on the foregoing analyses, PAR 1158 are not expected to cause significant permanent adverse effects on human beings, either directly, or indirectly. There is a potential for temporary adverse air quality impacts during construction activities to deliver and install water spray systems. However, these impacts were concluded to be less than significant and would terminate after installation of the water spray system is completed.

APPENDIX A

PROPOSED AMENDED RULE 1158

**PROPOSED AMENDED RULE 1158. STORAGE, HANDLING, AND
TRANSPORT OF COKE, COAL AND SULFUR**

(a) Purpose

The purpose of this rule is to reduce the emissions of airborne particulate matter from the storage, handling, and transport of coke, coal and sulfur; and to reduce the potential for the storage, handling and transport of these materials to violate AQMD Rules 402 – Public Nuisance and 403 – Fugitive Dust.

(b) Applicability

This rule applies to the operator of a facility that produces, stores, handles, transports, or uses coke, coal or sulfur.

(c) Definitions

For the purpose of this rule:

- (1) ACCUMULATION is any surface deposit of material greater than three ounces in one square foot other than inside an approved storage area, conveyor, transport vehicle, coker pit, slurry bin, water collection channel or separation pond.
- (2) AQMD PERMITTED FACILITY is a facility that has material storage or handling equipment required to have permits to operate from the AQMD.
- (3) BEST AVAILABLE CONTROL MEASURES represent fugitive dust control actions which are required to be implemented within the boundaries of the South Coast Air Basin. A detailed listing of best available control measures for each fugitive dust source type shall be as contained in the most recent Rule 403 Implementation Handbook, now or hereafter adopted by the Governing Board.
- (4) CALCINED COKE is coke which has been processed in a kiln.
- (5) CHEMICAL STABILIZER is any non-toxic chemical dust suppressant which is not prohibited for the uses proposed in this Rule or by any other applicable law, and which meets all applicable specifications required by any federal, state, or local water agency.

- (6) COAL is a solid, brittle, carbonaceous rock classified as anthracite, bituminous, subbituminous, or lignite by ASTM Designation D388-77.
- (7) COKE is a solid carbonaceous residue produced from a coker after cracking and distillation from petroleum refining operations.
- (8) COKER PIT is an open-top containment area at a refinery coker unit used to contain cut or cracked petroleum coke.
- ~~(89)~~ CONTAMINATED MATERIAL means a material that has become mixed with other materials or dirt so that it is no longer considered material or no longer meets marketable product specifications.
- ~~(910)~~ CONVEYOR SHUTTLE or TRAVELER or TRIPPER is a device supporting a conveyor that can travel forwards or backwards along a feed conveyor as needed to allow the conveyor to load material onto a selected area of a ship or pile.
- (11) DEWATERING TRUCK-LOADING BIN is a cylindrical tank with a funnel-shaped bottom which receives material in a slurry form and separates the solids from water by filters and gravity, eventually discharging the solids into a truck.
- ~~(1012)~~ DRY MATERIAL is any coke, coal, or sulfur, that does not meet this Rule's definition for moist material.
- ~~(1113)~~ ENCLOSED CONVEYOR is a conveyor which is totally enclosed in a tube or encompassed 360 degrees within a solid plane structure, or an equivalent conveying system as approved by the Executive Officer.
- ~~(1214)~~ ENCLOSED STORAGE is any completely roofed and walled structure or building, or truck or railcar covered pursuant to subparagraphs (d)(12)(A), (B), (C), or (D), surrounding an entire coke, coal or sulfur pile.
- ~~(13) EXISTING OPEN STORAGE means designated open piles of sulfur or coal that are served by equipment having an existing valid AQMD permit that was issued prior to June 11, 1999.~~
- ~~(1415)~~ FACILITY means any source or group of sources or other air contaminant-emitting activities which are located on one or more contiguous properties within the AQMD, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in 40 CFR Section 55.2. Such above-described groups, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one

facility. Sources or installations involved in crude oil and gas production in Southern California Coastal or OCS Waters and transport of such crude oil and gas in Southern California Coastal or OCS Waters shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas production facility on-shore.

(~~15~~16) FREEBOARD is the distance from the top of the material storage section of the truck trailer to the top of the material load at its highest point.

(~~16~~17) FUGITIVE DUST means any solid particulate matter that becomes airborne by natural or man-made activities, excluding particulate matter emitted from an exhaust stack.

(~~17~~18) HIGH WIND CONDITIONS is when wind speeds exceeds 15 miles per hour.

(~~18~~19) LOOSE means material that can be swept off a surface by a person using a whisk broom.

(~~19~~20) MATERIAL means any substance containing at least 50% by weight of coke, coal, or sulfur. The percent by weight shall be determined by at least a one ounce sample taken at any random point.

(~~20~~1) MOIST MATERIAL is material that has a moisture content that in no place is less than the following: coke material 8.3%, coal material 7.6%, and sulfur material 2.8%.

(~~21~~2) NON-LUMP MATERIAL means any coke, coal, or sulfur material which can pass through a 6.3 millimeter sieve (1/4 inch opening).

(~~22~~3) OPEN STORAGE is any material coke, coal or sulfur pile that is not in enclosed storage.

(~~23~~4) PAVED means improved by covering with concrete, asphaltic concrete, recycled asphalt, or asphalt.

(~~24~~5) PILE means any amount of coke, coal or sulfur material which attains a height of three feet or more, or a total surface area of 150 square feet or more.

(~~25~~6) PRILLED SULFUR is a product formed in a wet process involving the contact of heated liquid sulfur with cooled water, resulting in a sphere-like solid.

(~~26~~7) ROAD means any route with evidence of repeated prior travel by vehicles.

(~~28~~) SEPARATION POND means a container for separating coke from water by gravity, which has a liquid water surface at all points.

(2729) SILT is any particulate, including but not limited to coal, coke, or sulfur, with a particle size less than 75 micrometers in diameter as measured by a No. 200 sieve.

(30) SLURRY BIN is a container located at a refinery coker unit or its associated coke handling system holding a watery mixture of material.

(2832) STREET SWEEPER is, if purchased or contracted for before January 1, 2000, a vacuum or regenerative air street sweeper, and if purchased or contracted for on or after January 1, 2000, is a PM10 street sweeper pursuant to Rule 1186 – PM10 Emissions from Paved and Unpaved Roads & Livestock Operations.

(2933) SULFUR is a chemical element, atomic number 16 on the periodic chart, and which is found in crystalline or amorphous form.

(3034) TELESCOPING LOADING CHUTE is a length adjustable chute which completely encloses the material during ship loading operations.

(3435) TRACKIN – TRACKOUT ROAD is a road (excluding freeways), starting from the entrance or exit of the facility property and continuing away from the property for the first quarter mile of the road, that a truck trailer, used for material transport, travels on.

(3236) TRANSFER POINT is the point in the storage, handling or transport process where ~~conveyed~~-material being moved, carried, conveyed, or transported is dropped or deposited.

(3337) VEHICLE is any car, truck, in-service transportation, or off-road mobile heavy equipment.

(3438) WATER SPRAY SYSTEM means a dust suppression technique that uses water or water-based solutions delivered through pipes, tubes, or hoses that are fitted with one or more nozzles and operated at pressures ranging from 1 to 1500 psi.

(3538) WIND SCREENS are structures that are sufficient to deflect the wind away from conveyed material and reduce fugitive dust emissions, and are adjacent to both sides of and extend along the entire length of the conveyor, tall enough to extend above and below the conveyor and material.

- (d) Any facility that produces, handles, transports, or stores coke, coal, or sulfur material for transfer or shipment shall comply with all of the following requirements:

- (1) The facility operator shall not cause, or allow the discharge into the atmosphere of, fugitive dust for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 10% opacity (equivalent to 10% opacity under EPA Method 9 or one half of No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines).
- (2) The facility operator shall maintain all piles in enclosed storage.
 - (A) ~~The Structures or buildings used for~~ enclosed storage shall be equipped with and use as needed, a water spray system or permitted air pollution control equipment sufficient to control fugitive dust emissions at designed vents and at entrances or exits for material or vehicles so as not to violate the provisions of paragraph (d)(1).
 - (B) Any entrance or exits for material or vehicles shall have overlapping flaps, sliding doors or other devices(s) approved by the Executive Officer, which shall remain closed except to allow material or vehicles to enter and leave or when people are inside.
 - (C) For coal and prilled sulfur piles existing before June 11, 1999, the facility operator may achieve compliance with outdoor storage provided that the Executive Officer approves an open pile control plan, pursuant to subdivision (f).
- (3) The facility operator shall only conduct material truck unloading in an enclosed structure that is either equipped with a water spray system to be used as needed to prevent visible dust emissions or vented to permitted air pollution control equipment that is operated during unloading activities. The ends of the structure shall have overlapping flaps that reduce the opening to no greater than 11 feet high by 10 feet wide, sliding doors which shall remain closed except to allow the trucks to enter and leave, or other equally effective devices as approved by ~~an~~ the Executive Officer.
- (4) The facility operator shall only conduct railcar material unloading in an enclosed structure that is either equipped with a water spray system operated to prevent visible dust emissions, or vented to permitted air pollution control equipment that is operated during unloading activities. The ends of the structure shall have overlapping flaps, sliding doors or other equally effective devices as approved by the Executive Officer, which shall remain closed except to allow the railcars to enter and leave.

- (5) The facility operator shall pave and maintain as paved, the following areas:
 - (A) All ground surfaces within the facility where material accumulations routinely occur; and,
 - (B) All roads and vehicle movement areas within the facility that are used for transporting or moving material excluding AQMD permitted material enclosures and areas approved by the Executive Officer for material storage pursuant to other sections of this Rule.
- (6) When transport is by truck, the facility operator shall only receive or transfer material in truck trailers that, within one quarter mile of the perimeter of the facility, are driven only on paved roads.
- (7) In order to clean roads of accumulations, the facility operator shall comply with either (A) or (B):
 - (A) The facility operator shall prevent and remove any material so that the following limits are not exceeded:
 - (i) A silt loading value, for all silt particles, of 0.05 grams/meter² for any trackout road, excluding freeways and railroad tracks; and
 - (ii) A silt loading value, for all silt particles, of 0.25 grams/meter² for all roads and vehicle movement areas excluding railroad tracks within the facility that are used for transporting or moving material.
 - (B) The facility operator shall use a street sweeper to clean any trackin – trackout road and any road inside the facility, used to transport material.
 - (i) The street sweeping shall be sufficient so that not more than 4 hours elapses between each street sweeper cleaning or after every 100 truck material receipts or dispatches, but not less than one time daily when the facility is open for business.
 - (ii) Each 24-hr. day, the day beginning at 12:01 A.M., the facility operator shall designate and record whether for that day the facility operator is street sweeping every four hours or every 100 trucks. The record shall show the date and time when street sweeping was performed and the truck count.

- (iii) Facility operators shall begin cleaning up material spills of more than three pounds, or that cover more than a square foot, within one hour and continue clean up operations until the spill is removed.
- (C) Prior to the beginning of each calendar quarter the facility operator shall designate and record which alternative, A or B, the facility operator is choosing to comply with during the quarter.
- (D) A violation of subparagraph (d)(7)(C) shall be considered a violation of paragraph (d)(7).
- (8) The facility operator shall maintain all areas within the facility, except for those areas subject to paragraph (d)(7), free of any accumulation, unless the accumulation is:
 - (A) moist material;
 - (B) dry material not higher than three inches, except for crushed prilled sulfur which shall be removed; or
 - (C) completely covered.
- (9) Any new or replacement conveyors constructed after June 11, 1999 shall be enclosed conveyors. For purposes of this paragraph, the installation of a conveyor between two transfer points shall be a replacement conveyor. For conveyors existing before June 11, 1999, the facility operator shall, except for prilled sulfur, only conduct material conveying in compliance with either:
 - (A) All non-lump material shall be moist material; or,
 - (B) The material shall be conveyed in an enclosed conveyor(s).
- (10) The facility operator shall, except for prilled sulfur, maintain all material transfer points in compliance with one of the following:
 - (A) Total enclosure;
 - (B) Water spray system sufficient to control fugitive dust emissions during operations to comply with paragraph (d)(1);
 - (C) vented to permitted air pollution control equipment which is in full operation;
 - (D) Transfer only moist material and conduct such transfer only in an overhead truck trailer or railcar loader, or chute with a hopper, such that the exposed drop does not exceed four feet from the top of the truck or railcar; or,

- (E) Controlled by another equivalent method approved, in writing, by the Executive Officer.
- (11) The facility operator shall only load materials into ships through a telescoping loading chute which uses a water spray system, or an air pollution control system, sufficient to control fugitive dust emissions during operations to comply with paragraph (d)(1), and:
 - (A) Is extended to within five feet of the top of the pile; or,
 - (B) Is at least 5 feet below the hatch coaming.
- (12) The facility operator of an AQMD permitted facility shall not load material into any truck trailer or railcar unless it is subsequently and immediately covered, before leaving the facility, in one of the following manners sufficient to prevent material from escaping from the trailer or railcar onto the facility property:
 - (A) A solid sliding cover on the top of the truck or railcar that is kept completely closed, or;
 - (B) For trucks, A-a slot-top type cover that reduces the uncovered open surface area by at least 50% and extends above the trailer top edges, without gaps; and either the material contained in the trailer is moist material, or a chemical stabilizer is applied to the surface of the material in sufficient amounts and concentration so as to prevent fugitive dust emissions during transport; or,
 - (C) A continuous tarp that completely covers the trailer or railcar top, and for trucks, does not contact the material within the trailer. In addition, the tarp shall be installed or the trailer/railcar constructed to prevent wind from entering over the leading edge of the trailer/railcar rim into the interior of the trailer/railcar; or
 - (D) For railcars, an alternative method of control proven effective in preventing visible fugitive PM emissions escaping from the railcar and approved by the Executive Officer prior to its use.
- (13) Facility operators shall not load material into truck trailers or railcars such that a trailer or railcar leaks liquid that contains material onto the facility property.
- (14) If a truck trailer or railcar leaks liquid that contains material onto the facility property, the facility operator shall clean the affected property within one hour with a street sweeper or water.

- (15) The facility operator shall clean all out-going material transport trucks, whether loaded or empty, so that:
 - (A) Any part of any tractor, trailer or tire exterior surface, excluding the inside of the trailers, are free of all loose material in excess of 1 gram per square decimeter or 10 grams total.
 - (B) The material removed by the truck cleaning operation is collected and recycled or otherwise disposed of so that it does not result in fugitive dust emissions.
- (16) The facility operator shall not load sulfur into trucks or railcars unless:
 - (A) The sulfur is not greater than 1% crushed prilled sulfur by weight and;
 - (B) The loading is controlled by an enclosure or water spray system, approved by the Executive Officer, that reduces visible emissions to ensure compliance with paragraph (d)(1).
- (e) Any facility that stores material solely for use at the facility either as a fuel or as an ingredient in a manufacturing process shall comply with all of the following requirements:
 - (1) The facility operator shall not cause, or allow the discharge into the atmosphere of, fugitive dust for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 10% opacity (equivalent to 10% opacity under EPA Method 9 or one half of No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines).
 - (2) The facility operator shall maintain all piles in enclosed storage, except as provided in paragraph (3). Any openings shall have overlapping flaps, sliding doors or other equivalent devices(s) approved by the Executive Officer, which shall remain closed except to allow the vehicles to enter or leave.
 - (3) For facilities existing before June 11, 1999 only, for coal and prilled sulfur, the facility operator may achieve compliance with outdoor storage provided the executive Officer approves, in advance, an open storage pile control plan, or complies at all times with at least one of the following:
 - (A) Installs and maintains a three-sided barrier equal to the height of the material, with no more than fifty percent porosity to provide wind sheltering;

- (B) Maintains and operates water spray bars, a misting system, water hoses and or water trucks to control fugitive dust emissions;
 - (C) Applies chemical stabilizer(s) to control fugitive dust emissions;
 - (D) Installs temporary covers; or
 - (E) Other equivalent measures approved by the Executive Officer.
- (4) Within four hours after material is delivered to the facility by truck trailer, the facility operator shall inspect and clean up any spilled material on any paved road inside or outside the facility up to a quarter mile.
- (5) The facility operator shall use a street sweeper to clean any paved road used for material transport, inside or outside the facility, up to a quarter mile from the material delivery site at least once a week or after every 100 truck material deliveries, whichever results in the most frequent street sweeping.
- (6) The facility operator shall pave and maintain as paved, except for railroad tracks, the following areas:
- (A) All non-road ground surfaces within the facility where material accumulation occurs; and,
 - (B) All roads and vehicle movement areas within the facility that are used to receive material by truck trailer.
- (7) The facility operator shall pave or chemically stabilize and maintain all roads and vehicle movement areas within the facility, that are used for transporting coal.
- (8) The facility operator shall prevent, or remove within four hours, any coke accumulations on all paved ground surfaces except for those areas subject to paragraph (3), unless the accumulations are either:
- (A) Moist material; or
 - (B) Dry material not higher than three inches; or
 - (C) Completely covered.
- (9) The facility operator shall prevent, or remove within four hours, any coal deposit higher than three inches on all paved ground surfaces except for those areas subject to paragraph (7), unless the accumulations are either:
- (A) Moist material; or
 - (B) Completely covered.
- (10) The facility operator of an AQMD permitted facility shall not allow any truck trailer or railcar, while on the AQMD permitted facility, to transport material unless the trailer or railcar is covered in one of the following

manners, sufficient to prevent material from escaping from the truck/railcar onto the facility property.

- (A) A solid sliding cover on the top of the truck or railcar that is kept completely closed, or;
- (B) For trucks, A-a slot-top type cover that reduces the uncovered open surface area by at least 50% and extends above the trailer top edges, without gaps, and either the material contained in the trailer is moist material, or a chemical stabilizer is applied to the surface of the material in sufficient amounts and concentration so as to prevent fugitive dust emissions during transport: or
- (C) A continuous tarp that completely covers the trailer or railcar top, and for trucks, does not contact the material within the trailer. In addition, the tarp shall be installed or the trailer/railcar constructed to prevent wind from entering over the leading edge of the trailer/railcar rim into the interior of the trailer/railcar.
- (D) For railcars, an alternative method of control proven effective in preventing visible fugitive PM emissions escaping from the railcar and approved by the Executive Officer prior to its use.

(11) When transport is by truck trailer, the facility operator shall not receive or transfer material in truck trailers unless such truck trailers, that within one quarter mile of the perimeter of the facility, drive only on paved roads.

(12) The facility operator shall:

- (A) Record daily, any material delivery by truck trailer and any related street sweeping;
- (B) Record the application of chemical stabilizer pursuant to paragraph (e)(7);
- (C) Record the time of discovery, condition (moist or dry and or depth of material) and removal of any accumulations pursuant to paragraphs (e)(4), (e)(8) or (e)(9).

(f) Open Storage Pile Control Plan

The Executive Officer shall disapprove an Open Storage Pile Control Plan unless the facility operator demonstrates that the plan requires the facility operator to implement best available control measures on the pile(s) and provides that no material accumulates beyond the boundaries of the pile and provides that the facility will comply with all applicable AQMD rules. The Plan shall be submitted

as a Rule 1158 Open Pile Control Plan in a complete and approvable form and by the compliance deadline. On and after July 11, 2008, the Executive Officer shall not accept any new Open Storage Control Plan for approval.

- (1) In evaluating the proposed plan, the Executive Officer may reasonably require tests and sampling as necessary to determine the likelihood of emission reductions and compliance.
- (2) The plan shall be implemented by the facility operator upon approval by the Executive Officer.
- (3) The plan shall contain as a minimum:
 - (A) A contour map showing the location of the facility, the location of all piles, the perimeter boundary of the piles, and the surrounding land use and types of roadways within one quarter mile of the perimeter of the facility.
 - (B) The maximum daily amount of each material stored within the facility and the maximum daily throughput.
 - (C) A list of each applicable best available control measure for each fugitive dust source associated with the pile, including sources associated with moving the pile with mechanical equipment, and detailed documentation demonstrating how implementation of each measure will achieve compliance with all applicable AQMD rules under all conditions, including high wind conditions.
- (4) In approving a plan, the Executive Officer may require any reasonable conditions deemed necessary to ensure the operation complies with the plan and AQMD Rules. The conditions may include, but shall not be limited to, application frequency and location of water spray systems, frequency of chemical stabilizer treatments, limits on handling, storage and transport of crushed materials, the placement, construction or modification of permanent perimeter boundaries for each pile or group of piles, monitoring wind conditions, advance notification to the Executive Officer of ship loading activities, and performing ambient air monitoring.
- (5) In approving a plan, the Executive Officer may require any records deemed necessary to be maintained by the facility operator to demonstrate compliance with the plan. Such records shall be retained for at least 2 years and be made available to the Executive Officer upon request.
- (6) The Plan is only valid for one year. If the Executive Officer denies approval, the facility will have 120 days to submit the necessary

applications and two years from the date of the initial denial, to comply with the enclosed storage requirement. In the interim between before the storage pile(s) are enclosed, the Executive Officer may issue an interim plan that requires control measures deemed reasonably necessary to ensure the operation complies with all applicable AQMD Rules.

- (7) Compliance with the provisions of the approved plan does not exempt a person from complying with the requirements of the California Health and Safety Code, or any other AQMD Rule.

(g) Compliance Schedule

- (1) ~~The operator of a new facility shall immediately comply with all rule provisions.~~
- (2) ~~The operator of an existing facility shall comply with all rule provisions by August 11, 1999 except as provided in paragraphs (3),(4),(5), and (6).~~
- (3) ~~The operator of an existing facility that needs to construct or modify enclosures or equipment to comply with the Rule requirements shall:~~
- (A) ~~Submit all necessary application(s) for a permit to construct and operate in approvable form with all required filing fees to the Executive Officer no later than May 1, 2000 for pile enclosures.~~
- (B) ~~When it is necessary for the facility to construct or modify their equipment/facility to comply with the Rule requirements, the facility shall comply by the following deadlines for that equipment/facility modification only, otherwise the facility shall comply with the rule provisions by August 11, 1999:~~

Equipment/Other Facility modification	Comply by this date
Enclosed Storage Pile	June 11, 2001 if paragraph (3)(A) is complied with
Truck Wash	June 11, 2000
Telescoping Loading Chute	June 11, 2000
Water Spray or doors added to existing enclosure	June 11, 2000
Wind Screen	June 11, 2000
Truck Unloading Enclosed Structure	June 11, 2001
Railcar Unloading	June 11, 2000

Enclosed Structure	
Enclosed Conveyors and Material Transfer Points	June 11, 2001
Truck Trailer Covers	November 1, 1999 (if not building a truck trailer top- loading structure) December 31, 2000 (if building a truck trailer top- loading structure)

- ~~(C) When paving is necessary to comply with the rule:~~
- ~~(i) All facility operators shall complete paving by June 11, 2000, except as provided in clause (ii).~~
 - ~~(ii) The facility operators that determine and notify the Executive Officer by September 11, 1999 that the operator is required to pave more than 30,000 square feet of area shall complete such paving by June 11, 2001.~~
- ~~(D) During the interim period, prior to the compliance deadlines in subparagraph (g)(3)(B), operators that have Rule 1158 interim or permanent coke storage control plans previously approved by the AQMD, shall comply with all plan provisions.~~
- ~~(4) Existing facilities requesting a Rule 1158 Open Pile Control Plan for coal or sulfur shall comply with the following:~~
- ~~(A) The facility operator shall submit complete plan application in an approvable form with all required filing fees no later than September 11, 1999.~~
 - ~~(B) Once the Executive Officer approves the plan, it is immediately effective.~~
 - ~~(C) In the event the Executive Officer denies any such plan application, the applicant shall, by June 11, 2001, complete construction of the enclosures required by this Rule.~~
- ~~(5) The operator of an existing facility that does not submit all necessary application(s) for a permit to construct and operate in an approvable form with all required filing fees to the Executive Officer by May 1, 2000 to enclose outdoor storage piles of material, shall have until June 11, 2000 to remove the piles.~~

- ~~(6) — The operator shall notify the Executive Officer in writing within seven days after removing all open piles. In order to ensure adequate measures are taken to reduce fugitive dust emissions, the operator shall submit a clean-up plan to the Executive Officer and the plan shall be approved by the Executive Officer for approval prior to the operator commencing clean-up of open pile pads. The clean-up plan shall comply with all of the following:~~
- ~~(A) — The operator shall submit the clean-up plan within 60 days of notification of removal of open piles.~~
- ~~(B) — The provisions of the approved clean-up plan may differ from the requirements of Rule 1158 if the facility operator demonstrates to Executive Officer satisfaction that all reasonably feasible mitigation to prevent particulate emissions in violation of District rules will be employed.~~
- ~~(C) — No material may be added to the facility after the notification to the Executive Officer.~~
- ~~(D) — The completion date for clean-up shall be determined by the Executive Officer as part of clean-up plan approval.~~
- ~~(7) All existing Rule 1158 Interim or Permanent Compliance Plans approved prior to June 11, 1999 shall be are void immediately upon removal of all open piles from a facility.~~
- ~~(8) — Rule 1158 requirements shall supersede all existing Rule 1158 Interim and Permanent Compliance Plan provisions that are in conflict with Rule 1158 or not covered by the Plan.~~

(h) Test Method

- (1) ASTM Methods D-3302, D-4931, or equivalent methods approved by the Executive Officer, the California Air Resources Board and the U.S. EPA, shall be used to determine the material moisture content.
- (2) Appendix C.1, Procedures for Sampling Surface/Bulk Dust Loading, and Appendix C.2, Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples, as contained in Compilation of Air Pollutant Emission Factors (AP-42), as published by the U.S. EPA, or equivalent methods as approved by the Executive Officer, the California Air Resources Board and the U.S. EPA, shall be used to determine the silt loading value.

- (3) A method approved as accurate by the Executive Officer shall be used to determine the weight of truck exterior surface material and material silt deposits.
- (i) Compliance Determination and Performance Information
 - (1) For facilities subject to sub-division (d), each calendar quarter, if the facility operator selects the silt loading standard for that calendar quarter, and for all other operators once every calendar year, the facility operator shall perform the following tests pursuant to paragraphs (d)(7) and subdivision (h). Records of tests shall be maintained for a period of two years and shall be made available to District personnel upon request. Results of the test shall be submitted to the Executive Officer within 45 days after completion of each test. For facility operators testing once each calendar year, the test results shall be for information only, not for compliance determination. Silt loading tests shall be performed on the following roads or surfaces:
 - (A) On one paved road outside the facility, used by trucks transporting material, within one quarter mile of the exit of the facility; and
 - (B) On one road between the truck wash or truck cleaning area and the facility exit;
 - (2) For facilities subject to subdivision (d), each calendar quarter the facility operator shall conduct a test to show compliance with paragraph (d)(15) by sampling truck-trailer exterior surface material on one out-going material transport truck.
 - (3) The facility operator shall keep records of all applications and permits to construct or modify, from the AQMD or other agency, needed to meet the deadlines in (g)(3)(B) of this rule.
- (j) Recordkeeping Requirements

The facility operator shall maintain all records at the facility for a period of two years and make them available to AQMD staff upon request.
- (k) Exemptions
 - (1) The provisions of paragraph (d)(9) shall not apply to:
 - (A) Material feed conveyor(s) existing prior to June 11, 1999 which are interrupted by the conveyor shuttle, traveler or tripper, provided that the entire length of the feed conveyor(s) is equipped

- with permanent wind screens. ~~However, for conveyors which convey calcined coke to a shiploader exempt under (k)(6), the wind screen shall not be required until June 11, 2004.~~
- (B) Underground conveyors. This exemption shall only apply to those sections of the conveyors which are underground.
- (C) Conveyors located inside enclosed storage. This exemption shall not apply to those sections of the conveyor which are outside of the enclosed storage.
- (D) ~~Conveyors which only convey calcined coke to a ship loader, until June 11, 2004 at which time all conveyors shall comply with paragraph (d)(9).~~
- ~~(E)~~ That portion of an existing conveyor belt that contains the tensioner.
- (2) The provisions of paragraph (d)(12) shall not apply to prilled sulfur when the freeboard is, in no place, less than 3 feet.
- (3) The provisions of this rule shall not apply to the storage, handling, and transport of molten sulfur.
- (4) The provisions of paragraph (d)(2) shall not apply to the deposit of coke in separation ponds or that has a moisture content of at least 12% in coker pits, slurry bins, and coke dewatering truck loading bins, ~~and separation ponds.~~
- (5) The provisions of paragraph (d)(7) and (e)(5) shall not apply to the specific section of road where public vehicle through-traffic is denied access due to a construction project or road repair.
- (6) ~~Until June 11, 2004, the provisions of paragraph (d)(11) shall not apply to the loading of material into a ship whenever all of the following are met:~~
- ~~(A) The operator has installed and operates an instantaneous wind speed monitoring and recording system that is synchronized with the time of day and shall maintain a log of the date and time of each use of the headbox by pass;~~
- ~~(B) The instantaneous wind speed measured at the shiploader is less than 10 miles per hour;~~
- ~~(C) The shiploader shuttle boom is not long enough to allow discharge through the telescoping spout to reach the far side of that ship's hatch without using the headbox by pass;~~

- ~~(D) The facility operator notifies the AQMD 48 hours before shiploading is scheduled to commence; and,~~
- ~~(E) The shiploader was initially constructed before 1970.~~
- (7) The provisions of paragraph (d)(11) shall not apply to existing shiploaders permitted prior to June 11, 1999, for loading coal onto ~~cape-sized ships with a~~ (beam length greater than 105 feet) whenever all of the following are met:
- (A) The facility operator shall maintain a log of the date, time, loading rate, ship capacity, and duration of each use of the headbox by-pass;
- (B) A maximum of ten ~~cape-sized ships~~ with a beam length greater than 105 feet per calendar year are loaded under this exemption and the facility operator demonstrates to the Executive Officer's satisfaction that only the offshore side of the vessel is loaded without the required control equipment;
- (C) The shiploader shuttle boom is not long enough to allow discharge through the telescoping spout to reach the far side of that ship's hatch without using the headbox by-pass;
- (D) The facility operator notifies the AQMD 48 hours before shiploading is scheduled to commence; and,
- (E) The shiploader is not reconstructed or replaced after June 11, 1999.
- (8) ~~Prior to June 11, 2004, the provisions of paragraph (d)(2) shall not apply to an area maintained for contaminated material provided all of the following are met:~~
- ~~(A) the area occupies not more than two permanent locations designated by the facility operator for contaminated material;~~
- ~~(B) not more than 300 tons total is maintained at the facility at any one time;~~
- ~~(C) the operator maintains records documenting the total amount of material in the area; and~~
- ~~(D) the material in the area is maintained as moist material and wind-shielded on three sides.~~
- (97) The provisions of paragraph (d)(2) shall not apply to the following, provided the material or coke is removed within 48 hours and a permanent record is made of the incident:

- (A) Material taken off a conveyor because it is refused by a ship or it is hot coke (greater than 130 degrees Fahrenheit); or,
 - (B) Coke, up to 700 tons, that is incompletely processed from a refinery coker.
- (10) ~~The compliance deadline for enclosed storage pile in (g)(3)(B) and (g)(5) shall not apply until December 31, 2002 to any currently permitted facility existing on June 11, 1999 with a permitted open storage capacity of 150,000 tons or less of coke and located on publicly owned property provided such facility submits an application no later than August 11, 1999 to modify their existing Rule 1158 interim or permanent compliance plan to limit the amount of permitted open storage to the actual amount of open storage as of June 11, 1999, or the amount permitted in an Interim or Permanent Compliance Plan, whichever is less. There shall be no open storage after December 31, 2002.~~
- (11) ~~The compliance deadline for enclosed storage pile in (g)(3)(B) and (g)(5) shall not apply until June 11, 2001 to any currently permitted facility existing on June 11, 1999 with a permitted open storage of 300,000 tons or more coke provided such facility submits an application no later than August 11, 1999 to modify their existing Rule 1158 interim or permanent compliance plan to reduce their permitted capacity of open coke storage by at least 50% by June 11, 2000. There shall be no open storage after June 11, 2001.~~
- (8) The provisions of paragraph (d)(2) shall not apply to material being actively transported in a front-end loader.
- (9) The provisions of paragraphs (d)(2) and (e)(10) shall not apply to coal inside railcars that originated from outside California, provided the coal is moistened at the point of entry to a District permitted facility so as to prevent fugitive emissions pursuant to paragraph (d)(1).

APPENDIX B

CONSTRUCTION EMISSION CALCULATIONS

Construction Activity - Water Spray System Delivery

Construction Activity

Equipment Delivery and Unloading

Construction Schedule

1 day

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Forklifts	1	2.0	2

Construction Equipment Combustion Emission Factors

Equipment Type ^{b,c}	CO lb/hr	NOx lb/hr	PM10 lb/hr	VOC lb/hr	SOx lb/hr	CO2 lb/hr
Forklifts	0.250	0.643	0.035	0.086	0.001	54.4

Construction Vehicle (Mobile Source) Emission Factors

	CO lb/mile	NOx lb/mile	PM10 lb/mile	VOC lb/mile	SOx lb/mile	CO2 lb/mile
Delivery Truck ^d	0.02194915	0.02371258	0.00085607	0.00299270	0.00002565	2.719434
Passenger Vehicle ^d	0.01054844	0.00110288	0.00008505	0.00107919	0.00001075	1.09953226

Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Delivery Truck ^e	1	20
Worker Vehicles	2	10

Construction Activity - Water Spray System Delivery

Incremental Increase from On-Site Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Forklifts	0.50	1.29	0.07	0.17	0.00	109
Total	0.50	1.29	0.07	0.17	0.00	109

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Delivery Truck	0.878	0.949	0.0342	0.1197	0.0010	109
Worker Vehicles	0.422	0.044	0.0034	0.0432	0.0004	44
Total	1.30	0.99	0.04	0.16	0.00	153

Total Incremental Combustion Emissions from Construction Activities

Sources	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Daily Emissions	1.8	2.3	0.1	0.3	0.003	262
Annual Emissions	1.8	2	0.1	0	0.003	262

Combustion and Fugitive Summary

	PM2.5 Fraction^f	PM10 lb/day	PM2.5 lb/day
Combustion, Offroad	0.92	0.1	0.1
Combustion, Onroad	0.964	0.0	0.04
Total, lb/project		0.1	0.1

Construction Activity - Water Spray System Delivery

Notes:

- a) SCAQMD, staff estimation
- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) District values provided by the CARB, Aug 2004. Assumed equipment is diesel fueled.
- d) CARB, EMFAC2007 for Scenario year 2008 as summarized on SCAQMD website at http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF07_26.xls
- e) Assumed delivery truck travels 20 miles one-way
- f) CARB's CEIDARS database PM2.5 fractions - http://www.aqmd.gov/ceqa/handbook/PM2_5/finalAppA.doc

Construction Activity - Water Spray System Installation

Construction Activity

Installation of One Water Spray System

Construction Schedule

1 day

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Forklifts	1	8.0	4
Welder	1	8.0	
Generator Sets	1	8.0	

Construction Equipment Combustion Emission Factors

Equipment Type ^{b,c}	CO	NOx	PM10	VOC	SOx	CO2
	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Forklifts	0.250	0.643	0.035	0.086	0.001	54.4
Welder	0.234	0.319	0.030	0.092	0.000	25.6
Generator Sets	0.355	0.725	0.045	0.113	0.001	61.0

Construction Vehicle (Mobile Source) Emission Factors

	CO	NOx	PM10	VOC	SOx	CO2
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Passenger Vehicle ^d	0.01054844	0.00110288	0.00008505	0.00107919	0.00001075	1.09953226

Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Worker Vehicles	4	10

Construction Activity - Water Spray System Installation

Incremental Increase from On-Site Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Forklifts	2.00	5.14	0.28	0.69	0.005	435
Welder	1.87	2.55	0.24	0.73	0.002	205
Generator Sets	2.84	5.80	0.36	0.90	0.006	488
Total	6.71	13.50	0.87	2.33	0.013	1,128

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Worker Vehicles	0.844	0.088	0.0068	0.0863	0.0009	88
Total	0.84	0.09	0.01	0.09	0.00	88

Total Incremental Combustion Emissions from Construction Activities

Sources	CO lb/day	NOx lb/day	PM10 lb/day	VOC lb/day	SOx lb/day	CO2 lb/day
Daily Emissions	7.6	13.6	0.9	2.4	0.014	1,216
Annual Emissions	7.6	14	0.9	2	0.014	1,216

Combustion and Fugitive Summary

	PM2.5 Fraction^e	PM10 lb/day	PM2.5 lb/day
Combustion, Offroad	0.92	0.9	0.8
Combustion, Onroad	0.964	0.0	0.01
Total, lb/project		0.9	0.8
		0.9	0.8

Construction Activity - Water Spray System Installation

Notes:

- a) SCAQMD, staff estimation
- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) District values provided by the CARB, Aug 2004. Assumed equipment is diesel fueled.
- d) CARB, EMFAC2007 for Scenario year 2008 as summarized on SCAQMD website at http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF07_26.xls
- e) CARB's CEIDARS database PM2.5 fractions - http://www.aqmd.gov/ceqa/handbook/PM2_5/finalAppA.doc

Construction Activity - Installing Underground Water Piping

Construction Activity

Trenching/Paving Activity - Installing an Underground Water Piping

Construction Schedule

1 day

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Pavers	1	4.0	6
Paving Equipment	1	4.0	
Trenchers	1	3.0	
Rollers	1	2.0	
Cement And Mortar Mixers	1	3.0	

Construction Equipment Combustion Emission Factors

	CO	NOx	PM10	VOC	SOx	CO2
Equipment Type ^c	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Pavers	0.600	1.129	0.080	0.206	0.001	77.9
Paving Equipment	0.469	1.033	0.071	0.156	0.001	69.0
Trenchers	0.517	0.858	0.071	0.194	0.001	58.7
Rollers	0.442	0.907	0.063	0.141	0.001	67.1
Cement And Mortar Mixers	0.046	0.069	4.000	0.012	0.000	7.2

Construction Vehicle (Mobile Source) Emission Factors

	CO	NOx	PM10	VOC	SOx	CO2
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Passenger Vehicle ^d	0.01054844	0.00110288	0.00008505	0.00107919	0.00001075	1.09953226

Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Worker Vehicles	6	10

Construction Activity - Installing Underground Water Piping

Incremental Increase from On-Site Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

	CO	NOx	PM10	VOC	SOx	CO2
Equipment Type	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Pavers	2.40	4.52	0.32	0.82	0.00	312
Paving Equipment	1.88	4.13	0.28	0.62	0.00	276
Trenchers	1.55	2.57	0.21	0.58	0.00	176.10
Rollers	0.88	1.81	0.13	0.28	0.00	134
Cement And Mortar Mixers	0.14	0.21	12.00	0.04	0.00	22
Total	6.85	13.25	12.94	2.35	0.01	898

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

	CO	NOx	PM10	VOC	SOx	CO2
Vehicle	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Worker Vehicles	1.266	0.132	0.0102	0.1295	0.0013	132
Total	1.27	0.13	0.01	0.13	0.00	132

Total Incremental Combustion Emissions from Construction Activities

	CO	NOx	PM10	VOC	SOx	CO2
Sources	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Daily Emissions	8.1	13.4	13.0	2.5	0.013	1,030
Annual Emissions	8.1	13	13.0	2	0.013	1,030

Combustion and Fugitive Summary

	PM2.5 Fraction^f	PM10	PM2.5
		lb/day	lb/day
Combustion, Offroad	0.92	12.9	11.9
Combustion, Onroad	0.964	0.0	0.01
Total, lb/project		13.0	11.9
		13.0	11.9

Construction Activity - Installing Underground Water Piping

Notes:

- a) SCAQMD, staff estimation
- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) District values provided by the CARB, Aug 2004. Assumed equipment is diesel fueled.
- d) CARB, EMFAC2007 for Scenario year 2008 as summarized on SCAQMD website at http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF07_26.xls
- e) Assumed haul truck travels 20 miles one-way
- f) CARB's CEIDARS database PM2.5 fractions - http://www.aqmd.gov/ceqa/handbook/PM2_5/finalAppA.doc

Construction Activity - Installing New Foundation for Rail Tracks

Construction Activity

Installation of New Foundation For Rail Tracks (Under Water Spray System)

Construction Schedule

1 day

Equipment Type ^{a,b}	No. of Equipment	hr/day	Crew Size
Pavers	1	4.0	6
Paving Equipment	1	4.0	
Forklift	1	3.0	
Rollers	1	2.0	
Cement And Mortar Mixers	1	3.0	

Construction Equipment Combustion Emission Factors

	CO	NOx	PM10	VOC	SOx	CO2
Equipment Type ^c	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Pavers	0.600	1.129	0.080	0.206	0.001	77.9
Paving Equipment	0.469	1.033	0.071	0.156	0.001	69.0
Forklift	0.250	0.643	0.035	0.086	0.001	54.5
Rollers	0.442	0.907	0.063	0.141	0.001	67.1
Cement And Mortar Mixers	0.046	0.069	4.000	0.012	0.000	7.2

Construction Vehicle (Mobile Source) Emission Factors

	CO	NOx	PM10	VOC	SOx	CO2
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Passenger Vehicle ^d	0.01054844	0.00110288	0.00008505	0.00107919	0.00001075	1.09953226

Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Worker Vehicles	6	10

Construction Activity - Installing New Foundation for Rail Tracks

Incremental Increase from On-Site Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

	CO	NOx	PM10	VOC	SOx	CO2
Equipment Type	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Pavers	2.40	4.52	0.32	0.82	0.00	312
Paving Equipment	1.88	4.13	0.28	0.62	0.00	276
Forklift	0.75	1.93	0.11	0.26	0.00	163.50
Rollers	0.88	1.81	0.13	0.28	0.00	134
Cement And Mortar Mixers	0.14	0.21	12.00	0.04	0.00	22
Total	6.05	12.60	12.83	2.02	0.01	885

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

	CO	NOx	PM10	VOC	SOx	CO2
Vehicle	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Worker Vehicles	1.266	0.132	0.0102	0.1295	0.0013	132
Total	1.27	0.13	0.01	0.13	0.00	132

Total Incremental Combustion Emissions from Construction Activities

	CO	NOx	PM10	VOC	SOx	CO2
Sources	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Daily Emissions	7.3	12.7	12.8	2.2	0.013	1,017
Annual Emissions	7.3	13	12.8	2	0.013	1,017

Combustion and Fugitive Summary

	PM2.5 Fraction^f	PM10	PM2.5
		lb/day	lb/day
Combustion, Offroad	0.92	12.8	11.8
Combustion, Onroad	0.964	0.0	0.01
Total, lb/project		12.8	11.8
		12.8	11.8

Construction Activity - Installing New Foundation for Rail Tracks

Notes:

- a) SCAQMD, staff estimation
- b) Equipment name must match CARB Off-Road Model (see Off-Road Model EF worksheet) equipment name for sheet to look up EFs automatically.
- c) District values provided by the CARB, Aug 2004. Assumed equipment is diesel fueled.
- d) CARB, EMFAC2007 for Scenario year 2008 as summarized on SCAQMD website at http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF07_26.xls
- e) Assumed haul truck travels 20 miles one-way
- f) CARB's CEIDARS database PM2.5 fractions - http://www.aqmd.gov/ceqa/handbook/PM2_5/finalAppA.doc

Construction Activity - Off Road 2007 Emission Factors

Installation of One Water Spray System

Equipment	CO lb/hr	NOX lb/hr	PM lb/hr	ROG lb/hr	SOX lb/hr	CO2 lb/hr	Fuel Use, gal/hr
Aerial Lifts	0.2253	0.4026	0.0279	0.0781	0.0004	34.7	
Air Compressors	0.3872	0.8302	0.0579	0.1285	0.0007	63.6	
Bore/Drill Rigs	0.5388	1.4734	0.0648	0.1457	0.0017	165.0	
Cement and Mortar Mixers	0.0455	0.0693	4.0000	0.0120	0.0001	7.2	0.33
Concrete/Industrial Saws	0.4487	0.7639	0.0640	0.1561	0.0007	58.5	
Cranes	0.6365	1.6948	0.0755	0.1882	0.0014	128.7	9.82
Crawler Tractors	0.7090	1.6218	0.0988	0.2180	0.0013	114.0	
Crushing/Proc. Equipment	0.7817	1.6553	0.1048	0.2499	0.0015	132.3	
Dumpers/Tenders	0.0383	0.0709	0.0049	0.0137	0.0001	7.6	
Excavators	0.5977	1.4225	0.0776	0.1816	0.0013	119.6	
Forklifts	0.2495	0.6430	0.0346	0.0861	0.0006	54.4	2.48
Generator Sets	0.3549	0.7249	0.0446	0.1130	0.0007	61.0	2.79
Graders	0.6712	1.7198	0.0886	0.2055	0.0015	132.7	6.06
Off-Highway Tractors	0.9270	2.2742	0.1107	0.2692	0.0017	151.5	
Off-Highway Trucks	0.9133	2.9144	0.1056	0.2881	0.0027	260.1	
Other Construction Equipment	0.4749	1.2411	0.0539	0.1311	0.0013	122.8	
Other General Industrial Equipmen	0.6987	1.9012	0.0850	0.2111	0.0016	152.2	
Other Material Handling Equipment	0.6298	1.8362	0.0819	0.2038	0.0015	141.2	
Pavers	0.6000	1.1291	0.0799	0.2062	0.0009	77.9	3.59
Paving Equipment	0.4693	1.0333	0.0708	0.1556	0.0008	69.0	3.16
Plate Compactors	0.0263	0.0351	0.0025	0.0054	0.0001	4.3	
Pressure Washers	0.0705	0.1079	0.0081	0.0235	0.0001	9.4	
Pumps	0.3243	0.6224	0.0439	0.1090	0.0006	49.6	
Rollers	0.4419	0.9073	0.0629	0.1410	0.0008	67.1	3.07
Rough Terrain Forklifts	0.4928	0.9631	0.0800	0.1576	0.0008	70.3	
Rubber Tired Dozers	1.6950	3.4143	0.1474	0.3789	0.0025	239.1	
Rubber Tired Loaders	0.5552	1.3821	0.0768	0.1730	0.0012	108.6	5.06
Scrapers	1.5249	3.3991	0.1465	0.3677	0.0027	262.5	10.74
Signal Boards	0.0972	0.1806	0.0115	0.0254	0.0002	16.7	
Skid Steer Loaders	0.2735	0.3375	0.0326	0.0981	0.0004	30.3	
Surfacing Equipment	0.7654	1.8498	0.0712	0.1864	0.0017	166.0	
Sweepers/Scrubbers	0.5672	1.0277	0.0819	0.1963	0.0009	78.5	
Tractors/Loaders/Backhoes	0.4142	0.8303	0.0639	0.1307	0.0008	66.8	3.41
Trenchers	0.5171	0.8578	0.0714	0.1942	0.0007	58.7	
Welders	0.2336	0.3191	0.0297	0.0917	0.0003	25.6	

Equipment

gal/hr

Pavers	3.59
Rollers	3.07
Scrapers	10.74
Paving Equi	3.16
Cement and	0.33
Cranes	9.82
Graders	6.06
Rubber Tire	5.06
Tractors/Lo:	3.41
Forklifts	2.48
Generator S	2.79